# THE AMERICAN MEDICAL MONTHLY.

SEPTEMBER, 1859.

#### ESSAYS, MONOGRAPHS, AND CASES.

Obstetrical Notes, based on 1,000 Cases of Delivery. Read at the Annual Session of "The Medical and Chirurgical Faculty of Maryland," in June, 1859, as the Report of the Committee on Obstetrics. By WILLIAM M. KEMP, M.D., of Baltimore, Md.

[Concluded from the July No.]

II .- PERTAINING TO THE CHILD.

1. Months of Birth.

January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
92	73	72	65	70	90	88	88	83	100	82	97	1,000

Nearly half a century ago, Villermé, of Paris, in an essay inquiring into the distribution, by months, of human conceptions and births, found his statistics lead to the conclusion that fewer conceptions occur in the warm months of July, August, and September, than in any other three months of the year; and consequently, that the months of April, May, and June furnish fewer births than any other three months. The result in the above table corresponds nearly with this conclusion—March, April, and May offering the fewest births.

#### 2. Presentation.

Whole No of Cases.	Head.	Face.	Face to Pubis.	Breech.	Feet.	Knees.	Arm.	Shoulder.
912	865	2	13	26	9	1	9	1

Proportion of Special Presentations in Whole Number of Cases.

Presentations.	Cephalic Extremity.	Pelvic Extremity.	Arm.	Shoulder.
In 100	97	3	2	1 0

Analysis of Presentations with reference to Single or Twin Births.

	hole umber.	ad.	ce.	ce to bis.	sech.	et.	ees.	rm.	Shoulder.
	Na	He	Fa	Fa	Br	Fe	M	Ar	Sh
Single Births Twin Births	878 34	847 18	2	11 2	16 10	1	i	1	i

Two of the breech cases in single births were miscarriages, and not viable. They are included in the Table of Presentations, but will be excluded from Tables of Mortality.

Proportion of Special Presentations to each Whole Number in Single and Twin Births.

	Whole Number.	Cephalic Extremity.	Pelvic Extremity.	Arm.	Shoulder.
Single Births Twin Births	878 34	in 10 982 59	in 100 2 35,5	in 100 216 7	in 100

#### MORTALITY in the different Presentations in Single and in Twin Births.

	SINGL	BIRTH	18.				Twin	BIR	THS.	
		Whole No.	Deaths.		In 100.		Whole No.	Deaths.		In 100.
Head	847 }	860	10}	10	11	18	20	1}	1	5*
Face to Pubis Breech	11 }	15	3	4	26%	10	12	`i{	1	81
Knees	,	1	i				1	i'		

The three last preceding tables show:

1st. The great disproportion between the number of head presentations in single and in twin births, being in single cases 98 in 100, and in twins 59 in 100.

2d. The greatly preponderant number of presentations of the pelvic extremity in twin cases, being 35 in 100, while in single births it is 2 in 100.

3d. The excessive number of unnatural presentations in twin cases, being 2 in 34, while it is only 1 in 878 in single births.

4th. The diminished mortality in nates presentations in twin cases, being  $8\frac{1}{3}$  in 100, while in single labors it is  $26\frac{2}{3}$  in 100.

I thought it advisable and instructive to introduce, in this place, the general comparative tables of single and twin births; thus showing the facts at one view, rather than to reserve those leading facts until the subject of twins shall be considered. The specialties of twins will be treated in the appropriate place.

<sup>\*</sup> I have doubts whether this child was dead when born. The circumstances of the case make me think that the woman would have concealed her delivery altogether, if it had been possible. She was alone when this child (the first of twins) was delivered, and, from appearances, I supposed it had been born alive, but died because the woman did not know how to take care of it. She asserted, however, that it did not cry or breathe after its birth. I could discover no marks of violence about it. See comments on case 148, under head of "Twins."

Proportion of Special Presentations in Single and Twin Births, under different Obstetricians. The fractions, with large numbers, are disregarded.

		SIN	GLE B	irths.		1	Tv	VIN B	IRTHS	
	Whole No.	Cephalic Extremity.	Pelvic Ex- tremity.	Arm.	Shoulder.	Whole No.	Cephalic Extremity.	Pelvic Ex- tremity.	Arm.	Shoulder.
Dr. Metcalf	1746 546 878	in 100 97 96 98	in 100 153 3181 273	in 100 1746	in 100 1746 273	22 20 34	in 100 68 70 59	in 100 32 30 35 5	in 100	in 10

I regret that so few American statistics of midwifery have been published. Those which time has allowed me to examine afford, from their omission of minutiæ, no data upon which to construct a table upon this point more extensive than the foregoing.

Face Presentations.—The two children who presented the face were born alive. In connection with the record of the first case, the following note was made in the register at the time: "In this case the violence and rapidity of the pains prevented its rectification." It stands as No. 401 in the register, and I was influenced then by the opinion that all such cases should be rectified if possible. I attempted the rectification, but promptly abandoned it, on account of the strength and frequency of the pains, which, it was apparent, would deliver the fœtus in good time. There was no excessive discoloration or sugillation of the face; and altogether it resulted as well as if it had been a vertex presentation.

In the second case I made no attempt to interfere.

Having received my obstetrical precepts from the teachings of that accomplished practitioner, the late Professor Dewees, I felt impelled to adopt his procedures in the difficulties experienced in my early professional life. His reverence for the authority of Baudelocque indelibly impressed on my memory the assertion of the latter, that "for them (face presentations) to be terminated without help, it is requisite that the head should be very small, and the mother's pelvis, at the same time, very large; otherwise they become very long and difficult, the children are born with the face tumefied and livid, and almost always deprived of life, or ready to lose it, on account of the engorgement of the brain." It was in my mind a fixed precept before I saw a case of face presentation, that in such a labor the position of the head must be rectified if possible, whenever the head and pelvis were

of the ordinary dimensions. I was therefore ready, when, at half past 2 o'clock A. M., alone and far from help, I encountered my first face case, to rehearse my aphorism, and proceed to comply with its requirements. The head was not very small, neither was the pelvis very large, and I trembled for the result in case I failed to rectify the head. The severity and frequency of the pain (and I have no doubt my maladroitness assisted) prevented my succeeding. I saw the effect of the throes advance the head, and, in a sad desperation, I carefully watched its progress. The labor was soon ended; the child was living, and but little disfigured; and I learned a new lesson from observation.

I was induced to study this subject more extensively, and by the time my second case occurred I was prepared to meet it composedly, and let it make its own way into the world.

The mind of the profession has been divided as to the proper course to be pursued in face presentations. Until the latter part of the last century, the majority of obstetricians believed that it was almost impossible for these labors to be accomplished without assistance, and the discussion of the question with them was limited to the kind of assistance to be afforded.

Turning was at first considered as the only orthodox practice, and an attempt to afford relief by any other means became allowable only when turning was impracticable. So strong was this belief, that even Dr. Davis, of England, says, in his Elements of Op. Midwifery, "There can, in my opinion, be no doubt of the preferableness of turning to all other modes of treatment." When, more than one hundred years ago, Gifford published two cases of face presentation, delivered by the extractor, he appears to have felt it necessary to offer something like an apology to the profession for not practicing version; for he introduces the remark, that version is extremely difficult when the waters have been discharged, and the child is closely embraced by the uterus.

The history of the subject furnishes, from time to time, the opinions of those who entertained different views, and adopted a practice conformable to their convictions. Portal, La Motte, Deleurye, and others, had unequivocally asserted from observation, or published cases demonstrative of the fact, that face presentations do not necessarily require artificial assistance; but that, in the words of Portal, "in such cases no violence must be used, but nature be left to its own course; which done, there is no danger to either mother or child." Notwithstanding the expression "no danger," in Portal's opinion, the reports of cases left to nature show a somewhat increased mortality over vertex presentations.

Nothing tended to illuminate the subject so much as Boer's publication, in 1793, of eighty cases of face presentation, which occurred in the Vienna Lying-in Hospital. Of the eighty cases, but one was assisted, and there were three or four of the children born dead.

A careful study of the relation of the diameters of the child's head to the diameters of the pelvis during the transit of the fœtus, will show an adaptation almost as favorable as in vertex cases, and (except when the chin turns into the concavity of the sacrum) offering but little more embarrassment to its expulsion from the vulva. Let any one perform the mechanism of this labor on the obstetric fantom, and he will discover that the three diameters of the fœtal head to be regarded in face presentations, are the fronto-mental, the bi-malar, and the trachelo-bregmatic, which correspond respectively with the occipito-frontal, the bi-parietal, and the cervico-bregmatic in vertex presentations, and offer about the same measurements.

These two cases of presentation of the face, in one thousand deliveries, correspond very nearly with the general average as disclosed in United States statistics.

Face to Pubis.—I can give an analysis of only twelve cases in which the face was towards the pubis; and as there may be several points of interest in their detail, they are presented in tabular form.

Analysis of Cases presenting Face to Pubis.

Number of Case in Reg- ister.	Number of Labor.	Sex.	Weight.	Alive or Dead.	Single.	Twin.
195	4	В	73	Alive.	Single.	
216	5	В	10	do.	do.	
259	4	В	7 5	do.	do.	
265	1	В		do.		1st Twin.
283	2	G B	7	do.	do.	
293	6	В	9	do.	do.	
370	2	В	81	do.	do.	
382	6 2 5 5	G	91 81	do.	do.	
459	5	В	81	do.	do.	
513	3	G		do.	do.	
532	6	G B G		do.	do.	
540	5	В		do.		2d Twin.

Cases 216 and 293 were in the same person, and 370 and 513 were also in the same person; in both instances, it will be perceived, the labors were consecutive.

It is a little remarkable that the first occurrence should be only at the 195th case; and although the different numbers are not widely separated, there was no case from 540 to 1,000. This may be possibly accounted for, in part, by the fact that somewhere about the time of the occurrence of the last case, I became interested in determining, by my own observations, the accuracy of the great Heidelberg professor's opinion, that at the commencement of labor the cases of the 5th position of vertex (Baudelocque) were much more numerous than the second. This led me to ascertain, as early as practicable, the precise points about the presenting part; and I find, in the column of the register for remarks, such comments as the following: "5th position naturally rotated into 1st;" "4th naturally converted into 2d;" "4th changed by hand to 2d," &c.

I am certain, however, that the number from 540 onward would have been much less than previously.

There was nothing specially interesting in any of the cases, except Nos. 216 and 370, in which the labor was considerably more tedious than I thought would have been in a vertex case.\*

Presentation of the Shoulder.—This was the second child in a case of twins; the first child was a vertex presentation. It stands No. 148 on my register, and I sincerely regret that my notes on the case give nothing of the mode of the second delivery, except the remark, "Cephalic version was successful, and it was born as a head case."

\* It is a very important point not to confound the mechanism of labor in which the face is to the pubis, with the mechanism of labor in face presentations; nor to suppose that these two modifications of head presentations offer to the touch the same impression.

To one who observes carefully the exit of the head from the vulva, when the forehead is at the pubic symphysis, the extreme distention of the vagina and perineum affords just ground for fearing laceration of these soft parts. The cause most usually assigned for the increased risk of perineal rupture is, that the coaptation of the forehead to the arch of the pubis being less complete than that between the arch and the vertex in vertex cases, the head must in the former position press backward more strongly, and thus distend the perineum more extensively in order to escape at the vulva. But as, in this delivery, the vertex is born first, and turns posteriorly to allow the face to emerge, the forehead is very seldom brought under the arch until after the vertex has escaped. The forehead is behind rather than under the arch, and the diameter of the head which expands the vagina is that traversing the head from the back of the neck to the anterior fontanelle, the cervico-bregmatic; after the escape of the vertex, the fourchette and perineum are compelled to bear the strain of the whole power that is necessary to bring the forehead between the rami of the pubis, as it passes into the world.

The child was saved. I have no accurate recollection of the manner in which it was accomplished, and will not venture any explanation.

Presentation of the Arm.—There were two cases of presentation of the arm; one a single birth, the other the second child of a twin labor. Both were delivered by version, and both were dead.

Presentation of the Pelvic Extremity.—As the cases of breech, knee, and foot presentations resolve themselves into the same condition towards the completion of delivery, they may properly be considered in one group.

The 1,000 cases of delivery furnished 29 cases of presentation of pelvic extremity, of which 26 were breech, 2 feet, 1 knees.

Two of the breech cases were abortions; and as they were consequently not viable, they will be excluded from tables in which mortality is calculated.

Analysis of Presentations of Pelvic Extremity.—Excluding the two breech abortions in single labors, in which the children were not viable, we have 27 cases remaining for analysis.

Cases.	No. of Labor.	Sex.	Presentation.	Alive.	Dead.	Single Labor.	Twin Labor.
1	12		Breech.	Alive.		Single.	
2	3 3	Boy.	do.		Dead.	do.	
3	3	Girl.	do.	do.		do.	
4		Boy.	do.		do.	do.	
5	2	Girl.	do.	do.		do.	
6	7	Boy.	do.	do.			2d twin.
7 8	2 7 2 1	Boy.	do.		do.	do.	
8	1	Boy.	do.		do.		2d do.
9	1	Boy.	Feet.		do.	do.	
10	4	Girl.	Breech.	do.		do.	
11		Boy.	Feet.	do.			2d do.
12	3	Girl.	Breech.	do.		do.	
13	6	Girl.	Knees.	do.			2d do.
14	1	Boy.	Breech.	do.		do.	
15	5	Boy.	do.	do.	******		1st do.
16	1	Girl.	do.	do.		do.	
17	4.5	Boy.	do.	do.			1st do.
18	1 . 5	Girl.	do.	do.			2d do.
19		Girl.	do.	do.			2d do.
20	1	Boy.	do.	do.			2d do.
21	4	Boy.	do.	do.	*******	do.	
22	3	Boy.	do.	do.			1st do.
23		Boy.	do.	do.			2d do.
24		Boy.	do.	do.	*******	do.	
25			do.	do.		· do.	
36	4	Boy.	do.	do.			2d do.
7	6	Girl.	do.	do.		do.	******

## The table, condensed, gives the following points:

Whole No. of Cases.	Breech.	Feet.	Knees.	Males.	Females.	Alive.	Dead.	Single Child.	Twin Child.
27	24	2	1	16*	9*	22	5	15	12

The delivery of the cases (excepting Nos. 7 and 16) was accomplished without instrumental aid.

Cases No. 2 and 3 were the respective lady's second breech labor.

Cases 12, 21, 27 occurred in the same lady.

Case No. 4 was delivered of the child by a midwife.

Case No. 9 was not delivered under my superintendence.

The child in Case 7 was very large, and, not presenting a due correspondence of diameters with the diameters of the pelvis, it became literally jammed into the passages, and I was called to the assistance of the physician in charge. After much exertion, the delivery was secured with entire safety to the mother, but with the loss of the child.

Case No. 16 was a primipara. The only interference in her case was the use of a ribbon in the groin to facilitate the descent. The danger to the child begins especially with the delivery of the umbilicus, and becomes greatest when the head enters the pelvic straits. A few practical aphorisms treasured in the memory become eminently useful to the young obstetrician in his early experience in these cases.

# Frequency of Presentation of the Pelvic Extremity.

	Whole No. of Cases.	Breech.	Feet.	Knees.	Total.	In 100.
Dr. Van Bibber	4,192	61	20		81	1.93
" Bliss	771	16	8		24	3.11
" Storer	440	5	3		8	1.81
" Pleasants	400	7	3		10	2.5
" Burwell	598	17	9		26	4.34
" Pierson	265	1	3	1	5	1.88
" Metcalf	1.768	18	13	3	34	1.35
Bellevue Hospital	1,348	27	20		47	3.48
Dr. Potter	247	3	9		12	4.85
" Warrington	332	8			8	2.40
" Kemp	912	26	2	1	29	3.17
Total	11,273				284	

<sup>\*</sup> The sex of two of the children was not noted.

The totals give an average of a little more than  $2\frac{1}{2}$  presentations of the pelvic extremity in 100 deliveries.

An examination of the table reveals a great difference in the average of pelvic presentations as they are presented in the different statistics. I shall not attempt to form an opinion as to the cause of such discrepancies, believing that no fixed law determines these things, and that no practical good could result from such inquiry. It is interesting only as constituting a part of the facts which make up the entirety of obstetrical statistics. A far more interesting study is the mortality in breech cases, and the best means of procedure to lessen that mortality—or, in other words, to have our minds posted with a knowledge of what we are not to do, as well as with what it may be necessary for us to do in these cases.

I had designed to prepare and introduce, at this place, a table giving as full details as possible in reference to the ratio of mortality in presentations of the pelvic extremity of the fœtus, but upon examining the statistics I find that the reports are so meagre in details necessary for a useful table, that but little practical information could be gathered. I had designed also to analyze the facts of the table, and to deduce whatever of value in practice might appear in their results. I hoped to do this from the statistics which the practitioners of the United States have contributed to the journals, and thus arrive at the practical views which govern the obstetricions of our own country. I shall be glad to know that some abler hand may undertake this duty, and furnish this United States experience to the profession.

Mortality.—I can only comment on the mortality exhibited in my own table, and present such reflections as may appear apposite. It will be observed that in the last eighteen cases no child was lost. I have no doubt that the practical views which control the management of the delivery of breech cases have much to do with the fate of the child; and I regard it to be incumbent upon every one who undertakes to preside at a breech labor, to have in his mind a code of rules, embracing details, calculated to insure the most successful results to both mother and child.

I may, therefore, expect to be pardoned for giving a few of the points which I think should be regarded with much care in these cases. The books teach with distinctness their prominent and general circumstances, and enlarge sufficiently upon their indications and management. These cannot be even adverted to upon an occasion like the present.

The practical precepts which, in my judgment, should regulate the accoucheur's conduct in uncomplicated presentations of the pelvic extremity, are:

1st. The presentation of the nates can seldom be perfectly diagnosticated by the touch before the rupture of the amniotic membrane, because the presenting part generally remains high in the pelvis for a considerable time after the commencement of labor; and as the remoteness of the presenting part is not peculiar to the nates, therefore, in all such cases, a careful examination must be made immediately after the discharge of the waters, to ascertain the precise characters and position of the presentation.

2d. If the knees are presenting, they may rest upon one side of the pelvis and prop the breech upon the opposite side, so as neither to advance themselves, nor to allow the breech to traverse the pelvis; therefore, in knee presentations, when the knee is disposed to rest against the side of the pelvis, if the uterus is abundantly dilated, push up the whole of the presenting parts in the absence of pain, and bring down the feet; then leave the case to the natural powers.

3d. In breech and feet presentations, do not bring down the feet to expedite delivery. The evil effect of such ill-advised measure is experienced when the head comes to be delivered. There is high authority for bringing down the feet in breech cases, but the weight of authority and the teachings of experience are against the operation. The presumed necessity for any interference arose, at first, from the supposition that the pelvis did not afford room for the child to pass in this doubled condition, and hence cephalic version was the remedy proposed. This not succeeding, it was first proposed and practiced by Ambrose Paré, to bring down the feet, in order to lessen the bulk and to facilitate the delivery. Several later writers have advocated the practice. But it is unquestionably a bad practice. Ramsbotham tells us that William Hunter was once an advocate for this procedure; but afterwards he adopted the opposite views, and was accustomed to acknowledge in his lectures, "that when he used to extract the legs before the breech, he lost almost every child; but when he changed his mode of practice, and let the breech pass double, and did not allow the legs to escape until after the knees were born, he was much more fortunate in saving the children."

4th. In nates presentations the arms are generally in close apposition to the sides, with the forearms flexed and crossed on the breast; and the labor is finished with more facility if the arms continue in this position, than if, from any cause, the elbows become arrested in their descent, and the arms become unfolded and extended on the sides of the head as it enters the pelvis. Therefore do not draw upon the breech to hasten the descent of the child, but let it be accommodated slowly to the passages, lest the diameters of the child may not be accurately adapted to the diameters of the pelvis, and the elbows may be arrested and the arms unfolded.

5th. If it be important to aid in the descent of the breech, recollect that the feetus, by coinciding with the axis of the upper strait, will descend with the anterior hip in advance of the posterior, until it reaches the floor of the pelvis. At this point rotation occurs, and, as now the axis of the lower strait is to be traversed, the posterior hip advances, while the anterior one remains nearly stationary at the pubic arch; therefore in giving aid to the descent of the breech before it fully occupies the cavity of the pelvis, the greater amount of traction must be made on the anterior groin; but after the breech occupies the cavity, traction must be made on the posterior groin. All efforts of this kind must be made in assistance of the pains, and, in the absence of most urgent necessity, should never be employed when the pain is off.

6th. When the breech is born, the temptation is very great to draw upon it and help the labor along; FORBEAR.

7th. When the umbilicus is born, the cord is apt to become tense, and evil may result; therefore the cord should be drawn down to a sufficient extent to prevent any tension during the delivery of the superior parts of the fatus.

8th. After the delivery of the umbilicus, and the relief of the cord, ascertain the position of the arms. If they do not descend with the breast, by the natural powers, they will be placed by the sides of the head in its transit through the pelvis, and may retard delivery. It is well, therefore, to bring them down at this stage. The posterior arm should be brought down first; the power should be applied, as nearly as possible, at the elbow, and the arm brought over the face and breast.

9th. As the shoulders are about to emerge from the vulva, the head is engaging in the pelvis. As the descent of the head will be facile or delayed according to the extent of its flexion in bringing the chin close upon the breast, and as the pressure of the uterine contraction is the means by which this flexion is secured, therefore do not hurry the shoulders through the outlet, lest, by partially withdrawing the head from the uterine power, you not only prevent its flexion, but may cause such a degree of extension as to embarrass the further descent of the head.

10th. When the shoulders are fully born, the head has engaged in the pelvis, and has descended, perhaps, entirely beyond the influence of the uterus; its further expulsion by uterine contraction cannot be hoped for; therefore, in this state, exhort the patient to exert her powers in bearing down, so that the abdominal and pelvic muscles may detrude the head.

11th. There is great danger to the child if the head is long delayed in the pelvic passages, for the cord will be compressed between it and the pelvis; thereby the fœtal circulation will be arrested; and, as there is more or less separation of the placenta and compression of the uterine sinuses occasioned by the tonic contraction of the organ closing its cavity after the receding child, the fœtus will fail to receive due supplies of oxygenated blood, and may fall a victim to asphyxia or cerebral congestion; therefore endeavor to afford the child an opportunity to respire, and thus to decarbonize its own blood. To accomplish this, elevate the child's body towards the abdomen of the mother, and pass the hand (not a few fingers) along the posterior wall of the vagina until the points of the fingers fully pass the mouth; then press back the soft parts, so as to afford access for air to the child's mouth.

12th. Never pull upon the body to deliver the head, for thereby the head is likely to be extended, and the delivery made more difficult; but if there arise a necessity for interference to disengage the head from the pelvis, adopt the procedures taught in the books for promoting a greater flexion of the head, and a closer approximation of the chin to the breast; then extractive force exerted upon the shoulders may be made successfully.

3. Mortality in Individual Instances.—Of the 11 deaths in head presentations, (10 single and 1 twin,)

Three were dead before the incursion of labor.

Two were in cases of placenta previa.

One in a case of contracted pelvis, with tedious labor, delivered finally by the forceps.

One in a narrow pelvis. In this case the labor was protracted. In the last preceding pregnancy, I delivered the lady of a living child with forceps, after having suffered the labor to linger for some hours; but the case having been criticised by an authority whose experience was supposed to have made him a competent judge, the present case was allowed to progress with strict reference to the injunctions laid down by leading English authors. The mother's condition was regarded as the indication for interference. Her state required no assistance, and the natural powers were left to finish the labor. In her subsequent pregnancy, the same condition of labor prevailed, but

as soon as the soft parts fully warranted interference, I applied the forceps, and delivered a living child.

One was in a case of convulsions.

Of the breech cases I have no special notes. One was the second child of a twin birth.

Of the arm cases, two in number, both were dead-born.

The first occurred March 29, 1835. Whilst the lady was dining. the membranes ruptured without any premonition, and a large amount of water escaped. The patient lived more than three miles from my residence. I was immediately summoned. When I reached the case labor was active, and examination discovered an arm presenting. doubled on itself at the elbow. I immediately informed the family of the difficulty to be apprehended, and, being in my professional novitiate, desired consultation. The gentleman who came to my assistance, diagnosticating a knee, insisted, against my remonstrance, in bringing down the foot. This he attempted, but it proved to be the hand, I proposed to subdue the powerful action of the uterus by venesection and anodynes, and to deliver by version. He dissented, but proposed to remove the arm at the shoulder, &c. This led to the calling of additional assistance. Uterine pains were abated by a very large bleeding, with large doses of opium, and a very large child was delivered by version. In three weeks the woman walked to the city and rode home in a wagon without springs, but sustained no appreciable injury.

The other arm case was the second child in a twin labor, delivered by version.

4. Time of Birth.—In 495 children, the precise time of birth is noted. These give 249 born between six o'clock A. M. and six o'clock P. M., and 246 born between six P. M. and six A. M.

In 526 children, (including the foregoing,) the births marked A. M. or P. M., counting midnight and meridian as the extremes, were as follows: 301 A. M., 221 P. M., 4 M.

- 5. Sex.—In 788 children noted, there were 427 boys and 361 girls.
- 6. Weight .- Fractions are disregarded.

Pounds	3	4	5	6	7	8	9	10	11	12
Children	1	1	4	12	36	47	48	9	2	

Making the average weight of 160 children to be about 8 pounds.

7. Position of Presentation Changing.—The views of Naegele took the professional world somewhat by surprise, when his published opinions were found to controvert the order of frequency in which presentations of the head were presumed to occur. I was induced to examine my cases more carefully, and as early as the condition of the os uteri would permit, and I became satisfied that many of the cases delivered in the second position of the head (vertex to right acetabulum) were in the commencement presenting with the vertex at the right sacro-iliac junction, (4th of Baudelocque.) Nay, more than this occurs; for I have, with the finger on the presentation, followed the head in its change from the 5th position to the 1st, and have received it at the birth as though it had been an original first.

The mobility of the head, while it is above the upper strait, is so great, that the voluntary movements of the fœtus frequently sweep the extremities of the cranial diameters over almost the entire semicircumferences of the basin. This may be easily verified by retaining the finger in contact with the head in the intervals of pain. It appears, then, very plain that, at whatever point of the circumference of the strait the vertex may be when a pain occurs that will force it to engage in the strait, it will maintain that position until it descends to the point where rotation is to be effected. Under these circumstances, the vertex may engage at either extremity of the oblique diameters, if it be found there when the pains thrust it down into the strait. But if the child be small, or the pelvis be large, the position will continue to the end of labor; otherwise, the vertex will be rotated forward on its side of the maternal pelvis, and be delivered at the pubis.

While the fact of change of position is undeniable, my observations do not bear out Naegele's assertion, that the 4th presentation of the vertex is more frequent than the 2nd, at the beginning of labor.

This subject presents many points of interest to those who delight in recognizing the wisdom and the goodness of God, as manifested in all his creations, and the wonderful adaptedness of all his designs to subserve the best interests of his creatures. We here see structures arranged apparently for a certain end, and those ends accomplished almost universally with great precision, by means which we cannot fully understand.

The fact that the fœtus almost always presents in a manner calculated to enable the natural powers to effect its delivery, is, in itself, an incontestible evidence of a wise Designer and Creator. The remarkable tendency which malpositions of the head manifest, to be

reduced to some natural presentation, and thereby render the delivery more conformable to the mechanism of the more favorable; the wonderful propensity of the vertex, when it presents posteriorly, to offer at the pubis in the last stage of labor, thus securing the most happy result from an inauspicious beginning; the law or force which determines the rotation of the vertex into the hollow of the sacrum, and brings the chin to the pubis in face presentations, in which, if the vertex be brought to the arch, a life is almost necessarily lost;—these demonstrate a most wonderful, wise, and good Creator. Moreover, in every variety of nates presentation, if the case be not injudiciously interfered with, the same incomprehensible power has ordained the rotation of the face to the sacral excavation as the most constant mechanism, and the one by which the probabilities of the infant's life are greatly enhanced.

These phenomena cannot fail to excite in the reflecting observer emotions of admiration and most profound reverence.

The mysteries connected with the inception of vitality in the ovum, and the remarkable arrangements for the perfection of that life with the organic development of the fœtus, are but a part of the series of displays of infinite power, wisdom, and goodness in this portion of creation. How true are the words of the gifted but unfortunate Boyse:

"E'en the weak embryo, ere to life it breaks, From his high power its slender texture takes; While in his book the various parts enroll'd, Increasing, own eternal Wisdom's mould."

8. Twins.—The 1,000 deliveries gave 19 cases of twin labor.

Two of the labors were abortions, with boys, before the children were viable, and a note of the sexes only was made. Nothing occurred different from the circumstances of a single abortion, except that in one case there was considerably more blood lost than usually attends an ordinary case.

These two cases will properly be excluded from any calculation of mortality, but will be used in the comparison of sexes.

## Analysis of Twins.

Register.	No. of Labor.	Presen	tation.	Se	ex.	Weight.	Interval between Children.	Alive or Dead
57 08	1 6	Head.	Head.	В. В.	B. B.			A. A
36 49	i	Head.	Shoulder.	B. G.	B. G.		***************************************	
26	7	Head.	Breech.	B.	В.	64 64	114 hours. 25 minutes.	D. A
65	1	Face to Pubis.	Breech.	B.	B.	1	25 minutes.	A. A
33	2	Head.	Head.	B.	G.	54 64		1
15	4	Head.	Feet.	B.	B.	- og - og		A. A
63	6	Head.	Knees.	G.	G.	64 64	45 minutes.	A. A
40	5	Breech.	Face to Pubis.	B.	B.		20 minutes.	A. A
74		Head.	Head.	B.	G.		1 hour.	A. A
90	1	Head.	Arm.	G.	G.		1 hour.	A. D
00	4	Head.	Breech.	B.	G.		20 minutes.	A. A
09	2	Head.	Head.	B.	G.		15 minutes.	A. A
35		Head.	Breech.	G.	G.		15 minutes.	A. A
66	1	Head.	Breech.	G.	В.			A. A
30	3	Breech.	Head.	B.	G.			A. A
94	1	Head.	Breech.	B.	B.			Α. Δ
78	4	Head.	Breech.	B.	B.			A. A.

Nos. 108 and 136 were abortions—the children not viable.

Nos. 108 and 226 occurred in the same person. The latter number was her third twin labor.

No. 136 was the lady's third twin labor.

No. 600 was the lady's second twin labor.

Nos. 730 and 878 were consecutive labors in the same person.

The nineteen labors were afforded by seventeen individuals, of whom, 13 produced twins for the first time.

2 " " second time.

2 " " third time.

# Preceding Table Condensed.

Fn	SECOND CHILD.										
Presentation.	Total.	Alive.	Dead.	Male.	Femule.	Presentation.	Total.	Alive.	Dead.	Male.	Female.
Head Breech	15 2	14 2	*1	10 2	5	Head Breech	6 7	6	··i	2 5	1
	••••					Knees	1	1			1
Abortion				2		Arm Abortion	1		1	2	1

<sup>\*</sup> See note to Table of "Mortality in the different Presentations in Single and in Twin Births," under the head of "Presentations."

The presentation of the shoulder was converted into one of the vertex by cephalic version, but as, at the time of its occurrence, I made no extended note of the manner of its being accomplished, I think it improper to do more than state the mere fact that it was done.

This case (148) is interesting, however, in other particulars which were fully noted at the time. The woman was alone when her first child was born, at 1 o'clock, A. M. She says she had great hæmorrhage after the birth of the first child until something pushed down into the upper part of the vagina, at which time the bleeding ceased. I saw her first at 10 o'clock, A. M., nine hours after the birth of the child. There was no hæmorrhage now. The placenta was partly in the vagina and partly in the uterus. I removed it; discovered another child in utero. She had very trifling pains. I waited until 12 M. The membranes of the second child were still entire. The indisposition of the uterus to act with decision caused me not to interfere hitherto. At 12 m. I gave her fifteen grains of ergot, which acted slowly, producing a moderate amount of pain. I ruptured the membranes and then promptly examined again, and detected the shoulder. This was rectified, and the head, brought to the strait, was delivered in a short time. The child was alive, but feeble.

A point of considerable interest is the length of time during which the placenta was detached, before the birth of the second child. About eleven hours must have elapsed between the separation of the first placenta and the birth of the second child, allowing that the sensation of something pushing into the vagina marked the time of the casting off. The occurrence of circumstances like these has greatly modified the opinions formerly entertained of the danger to the second child, as well as of the hazard to the mother from hæmorrhage. We might here advert to the manner of vascular connection between the uterus and placenta; the source of hæmorrhage, when a portion of the placenta is separate from the uterine wall; and the probable reason why hæmorrhage is generally suspended by the total detachment of that mass. This would involve a review of the many interesting experiments and dissections which have been made upon the human subject, as well as upon inferior animals, and would require a discussion of the proper application of these facts in directing the practical treatment of cases not infrequently occurring in the experience of acconcheurs. However interesting and profitable the consideration and attentive study of these cases may be, we are forbidden, by the occasion, to enlarge upon them. We will dare, however, to urge the members of this faculty to give great diligence to the study of the

later literature of this subject, as affording much that is interesting in fact, and that conduces to the highest good of those who intrust their lives and their health to the knowledge and judgment of the medical practitioner.

The presentation of the arm (Case 590) occurred with a second child, and was delivered by version.

Case 226 was the lady's third pregnancy. The two children appear to have had originally separate placentæ; but in the progress of gestation they became united to a sufficient extent to allow the coalescing and fusing of the two chorions. The delivery showed that each child had his funis and amnios distinct, whilst a common chorion enveloped them both. By the laws, generally acknowledged as operative in the production of monsters, we must suppose that if, in a case like this, the amniotic sacs had had their contiguous portions removed so as to allow contact between the germinal membranes of the children, and the position of the children had been similar, the result would, most probably, have been a fusion of the children and the birth of a monster. But as the presentations were respectively head and breech, no monster would have resulted. The case is suggestive of many interesting reflections, in which, however, we must not now indulge.

In Case 463 the two placentæ were fused for a considerable extent of their circumference, and came away united in this manner.

In Case 540 there was one large placenta, but a distinct funis for each child.

In Case 609 the birth of the first child was perfectly ordinary. In ten minutes after its delivery a powerful and continuous pain delivered the second child enveloped in its membranes, with one large placenta common to the two children.

The following table demonstrates a varying proportion of twin cases, as they occur in different series of observations:

	Whole No. of Cases.	Twin Cases.					Author	ity.		
Dr. Warrington.  Barwell.  Bliss  Pleasants  Storer  Pierson  Metcalf  Bellevue Hospital  Dr. Potter  Cock.  Van Bibber.  Kemp.  Totals	354 588 820 420 451 274 1,786 1,410 304 533 2,503 1,000	3 10 8 5 5 5 5 11 23 2 15 17 19	1 1 1 1 1 1 1 1 1 1 1	in in in in in in in in	118 59 102 84 90 55 162 61 152 36 147 53	Annual Add	ress Mass.	Med. S	ocie	7 14 15 20 34 ty, 1856

This table gives, by considering the totals, a general average of one twin labor in about 85 cases.

I have heretofore cited only statistics furnished by practitioners in the United States, because I have been anxious to arrive at the result of American experience, as that which most concerns us, and should ever be a subject of much interest to those who estimate their country aright.

I contemplate, with gratification, the day when the published experience of physicians in the United States will be sufficiently full to furnish a mass of American facts which shall be a rich contribution to the literature of obstetrics, and when the principles and laws deduced from these facts shall be considered necessary aids in determining great questions of science. Let our practitioners but carefully record their cases, and publish the results of a sufficiently extensive series of observations, and the United States will command her honorable rank in the scientific councils of the world.

The comparative frequency of twin labors in different countries may be seen by connecting the totals of the last table with a table of European statistics given by Churchill.

	United States.	British.	French.	German
Whole Number,	10,443	161,042	36,570	251,386
Twin Labors,	123	2,477	332	2,967
1 in	85	69	110	84

Sex of Twins.—It may not be uninteresting to refer to the sexes of twins, as appear by the following table:

No. of	Both	Both	Male and	Total	Total		
Cases.	Male.	Female.	Female.	Males.	Females.		
19	9	4	6	24	14		
in 100	47,7	2110	31 <del>11</del>	63,3	3616		

This series shows a different result from other published tables, in the following particulars:

1st. In the number of "Both Males" being greater than "Both Females."

2d. In the number of "Male and Female" being greater than "Both Females."

3d. In the number of "Total Males" being greater than "Total Females"

The following tables give United States and English numbers:

Author.	No. of Twin Cases.	Both Males.	Both Females.	Male and Female.	Country.
Dr. Metcalf's Table Dr. Kemp's Cases	38 19	11 9	17 4	10 6	U. States. Do.
	57	20	21	16	1
Dr. Churchill's Table Dr. Ramsbotham's Cases	457 536	131 171	145 183	181 182	England. Do.
	993	302	328	363	

9. Children Diseased.—One of the children gave incontestible evidence of disease arising from syphilis in the father.

In one case the child died about the  $4\frac{1}{2}$  month of gestation; the only assignable cause being syphilis in the mother. The child was retained until the full period, and the entire ovum was then born in one mass; the placenta and membranes enveloping the child unbroken.

Another case, illustrating the communication of small-pox to the fœtus in utero, is sufficiently interesting to justify a narration of the circumstances.

A lady was seized with a chill, followed by high fever and great headache. During the evening labor came on. After her delivery, symptoms, anomalous in the parturient, persisted, unattended by any indications of metritis, peritonitis, or any apparent phlegmasia. The symptoms resembled those of a severe malarious fever, yet no plausible occasion of such attack could be assigned. On the third day an eruption bestudded her surface, attended by a decline in her arterial excitement. I diagnosticated variola, and immediately vaccinated the infant. On the seventh day after birth variola appeared upon the infant, and pursued its ordinary course. The child survived the disease, and recovered perfectly. The circumstances evidently show the infection of small-pox in the infant while it was in utero.

One child died of idiopathic umbilical hæmorrhage.

10. Deformed.—There were eight cases of deformity, and one case of absence of the anus and lower part of rectum. Of these,

One was a case of double hare-lip and double cleft palate.

Two were cases of single hare-lip and cleft palate.

Two were cases of club-foot. These were interesting, and, being worthy of note, will be described more at length presently.

One was a case of tumor on occiput. This will be described presently.

In one child the two first fingers of left hand were adherent to the second joint.

In one child (a breech presentation) the thighs were adherent to the anterior wall of the abdomen until within a very short distance from the knee. The integument of the abdomen was continued around each leg throughout the entire distance of the adhesion. One arm was adherent in like manner to the neck and face as far as the elbow, and the shoulder-joint of that arm was immovable after the attachment of the arm to the neck and head was severed. If the child had been a head presentation, it is very likely the thighs would have been torn from their adhesion to the abdomen in its delivery. It lived for some hours after its birth.

Club Feet.—The two cases were children of the same parents. A perfect child was produced at an intermediate birth. The first case was clubbed in both feet; one foot was an extreme degree of varus; the other foot was a less degree of the same variety. The second case was one of varus also, one foot only being distorted. The great practical interest of these cases consists in their both having been perfectly restored by the use of apparatus, without any operation. The plan of treatment was that detailed by Dr. Heber Chase, of Philadelphia, in the American Journal of Medical Sciences, New Series, Vol. I., p. 88; and also in the Maryland Medical and Surgical Journal, Vol. II., p. 181. I must not, on this occasion, detail the particular steps of treatment, but I will most earnestly endeavor to impress these cases upon your memory, that you may be prepared to adopt so successful and so simple a plan of cure, in any cases that may fall under your observation. The complete success in these cases proves the correctness of the principles which the apparatus is designed to carry out so completely.

Tumor on Occiput.—This case was in charge of a very intelligent gentleman, who had watched it for some hours, and when he felt embarrassed was, very properly, unwilling to institute any procedures without counsel. When I examined the case I discovered a round, firm body, closely resembling a child's head, but without fontanelles or sutures, occupying the cavity of the pelvis. Upon exploring it fully, it presented the same characteristics at every point of its sur-

face, except a circular space about the size of a dime-piece. Pressure upon this spot detected a contained fluid. It was impossible to discover the part to which the tumor was attached, inasmuch as its size and extreme firmness prevented any examination beyond. The tumor was pierced at the soft spot, and the contents discharged. This afforded an opportunity to ascertain that the vertex was ready to engage in the upper strait. The finger was inserted into the rent in the tumor, and traction made by it upon the head, which promptly entered the pelvis and was born by a few pains. The tumor was covered by a prolongation of the integuments from the junction of the nucha and occiput; its walls were firmly cartilaginous, and its cavity evidently communicated with the cerebro-spinal canal.

Absence of Anus.—In this case an operation was performed to find the lower terminus of the bowel. Selecting a spot where we supposed the anus should be, a very careful exploration was made by Professor Baxley, in the direction of the ordinary course of the rectum, until he had penetrated the distance of more than an inch, when a slight appearance of meconium announced that the bowel had been reached. The opening was delicately enlarged, and the operation was completed. For a day or two there were hopes of success, but an inflammation supervened internally, and the child died.

11. Fatus Retained from Early Months.—Several cases occurred in which the fœtus perished in the early months of pregnancy, but was retained until the expiration of the ordinary term, and was delivered in a state of preservation, without any trace of putridity.

12. Length of Funis.—A number of cords was carefully measured, but as your time would be unprofitably consumed by lengthy remarks and comparisons, I may simply state that, of the cords measured, the shortest was 15 inches, and the longest 53½ inches in length.

13. Intestinal Hamorrhage of the Child.—In this case profuse intestinal hamorrhage occurred on the third day, causing extreme exhaustion of the child. It was promptly arrested by administering one-drop doses of tinct. ferri sesquichlor. suspended in a little mucilage, and repeated at intervals of two or three hours.

14. Head firmly Ossified—Third Position of Baudelocque.—This was the lady's second labor. The almost entire obliteration of fontanelles and sutures greatly embarrassed the diagnosis of the presentation. I saw the case at 10 o'clock, A. M. Pains were recurring at intervals of six and eight minutes. Os uteri slightly open; presenting part beyond reach of the finger. At 12 M., the os was more dilated, thick and soft, with small bag of waters. At  $3\frac{1}{2}$  P. M. the soft parts were

well relaxed; os uteri well dilated. The waters were at this moment discharged by a pain. The head was found resting at the brim of the pelvis, but as I could perceive neither a fontanelle nor unequivocal suture, I was unable to determine the position of the head. The hand was now introduced into the vagina, when, by the contour of the head and the position of the ears, the vertex was found presenting at the pubis. The head was moved into the second vertex position, and strong uterine contractions having been provoked by the manipulation, the child descended rapidly, and, the pelvis being capacious, the delivery was accomplished in fifty minutes. When the head cleared the vulva, the vertex turned to the left thigh of mother, as in an original first position of vertex. The placenta followed in twenty-five minutes. The child was large, and the head remarkably ossified. The anterior fontanelle was almost entirely obliterated. The lady had gone a month beyond her expected delivery.

15. Instrumental Labor.—Instruments were resorted to twenty-eight times in the 1,000 cases, giving an average of 23 in 100, or 1 in 35%, for the use of instruments.

In these cases the vectis was used three times, the forceps twenty-two times, and the perforator three times, giving an average employment of the vectis once in 333\frac{1}{3} cases; of forceps once in 45\frac{5}{11} cases; and of the perforator once in 333\frac{1}{4} cases.

The Vectis was used in the three cases to effect a better coaptation of the head to the diameters of the pelvic canal.

In one case the Perforator was employed to lessen the head, which was pitched in the iliac fossa. When I saw the case, (in consultation,) labor had been active for some hours, and the waters had been long discharged. The physician in charge had unsuccessfully endeavored to use the vectis and the forceps, but had not attempted version. The vagina was becoming hot and tender, and the child afforded no indications of being alive. Under these circumstances, the perforator was deemed the proper means for the accomplishing of the delivery, and it was effected readily in this way. The placenta was so firmly adherent as to require to be peeled from the uterine wall by the hand. In the other two cases, the promontory of the sacrum jutted so far into the upper strait as not to afford space for the passage of the unreduced head. Neither of the cases was a first labor. These cases occurred before the recent discussion of the propriety of version as a substitute for the crotchet; and as no information was obtained bearing upon the basis of said discussion, I can merely report them in this simple manner.

### Analysis of Forceps Labors.

Number of Labor	1	2	5	6	7	8	10	12	Not Designated.
Number of Cases	13	2	1	1	1	1	1	1	1

The table is to be read thus: the forceps were used in 13 first labors: in 2 second labors; in 1 fifth labor, &c.

In four of the first labors, the forceps were used to deliver the fœtus on account of convulsions in the mother.

In the fifth labor case the pelvis was deformed to an extent sufficient to interfere with the delivery of the child. Seventeen months previously, I had attended the lady in her fourth labor, at which time her child was born alive by the natural powers. A deformity of the pelvis was observed at that time, but it was not sufficient to prevent, although it greatly retarded, delivery. But at the time of her fifth labor, the deformity had increased, and after waiting several hours for the unassisted pains to thrust down the child, I feared the consequences of a longer delay, and applied the forceps. The delay which I allowed was, however, too long for the safety of her soft parts, and I was grieved to see a urinary fistula as the consequence of that delay. I feel certain that the forceps had no agency in the production of the slough, and that I might possibly have saved the child and preserved the integrity of the vesico-vaginal septum, if I had used them an hour or two earlier in the labor.

The 6th, 7th, and 8th labor cases occurred in the same lady. The forceps were used in each case when the head was occupying the cavity of the pelvis. At this point in each labor, the pains became feeble and inefficient. The soft parts were perfectly prepared for delivery, and a longer waiting would have involved much anxiety and suffering for the patient.

The 10th and 12th labor cases happened in the same person. The pelvis was narrow, and unassisted delivery, with an ordinary child, would necessarily be very tedious. In the 10th labor, when the head descended to the straitened pass, it soon became apparent that much effort must be expended in forcing its way by the natural powers. The soft parts were well relaxed and lubricated, and I preferred the assistance of the forceps for present relief. The child was born alive, and well. Eighteen months after this, her 11th labor occurred. For

reasons mentioned under the head of "Mortality in Individua Instances," this case (the 11th labor) was not assisted, and the child was born dead. In the 12th labor I had recourse to the forceps, and the child was born alive and strong.

The reasons for the use of the forceps in the 22 cases may be succinctly stated thus:

Four times on account of eclampsia.

Once on account of deformed pelvis.

Twice on account of narrow pelvis.

Fifteen times to assist the passage of the head through the pelvis, because of delay in the second stage of labor.

I pray you to bear with me in occupying a portion of your time by offering some comments on the table, and some reflections on the use of forceps in the deliveries.

With those who entertain the opinion that first labors are of all others generally the most illy adapted to any interference from the accoucheur, it may excite the spirit of criticism to be told that, of the 22 forceps cases, 13 were primiparæ. But why are first labors, more than others, supposed to offer difficulties and objections to the use of forceps, and why are they generally expected to be longer in duration than others? Is it because of the undue rigidity of the soft parts, and their indisposition to relax? This cause cannot be assigned with equal plausibility for first labors in all the different years embraced, within the child-bearing period of women. The books assign this as a cause for tedious labor when it occurs in those who marry late in life. If this be true, those who marry soon after maturity should be (cateris paribus) exempt. We know that in first labors, at all ages, the first stage is frequently protracted and exhausting, and often produces an enfeebled and irritable womb in the second stage, thereby causing the uterine contractions to be peculiarly painful, and at the same time ineffective. This, I apprehend, is attributable to the fact that the process of labor, when induced for the first time, awakens new influences and sympathies in the system, and in this, as in the majority of new actions in the organs, the parts, thus newly affected, do not promptly obey the reflex impressions communicated to them. But whatever may be the cause for this tardy softening, which gives character, in the judgment of so many, to a first labor, I may ask at once the question, But if relaxation has already occurred, wherein does a first labor differ in indications from any other labor? Why, under these circumstances, are not the same means of relief equally as applicable in a first as in any other labor?

The great difference of opinions, as to what constitutes a necessity for the use of forceps, has beclouded the question, and nothing but a patient criticising of those opinions, and a careful examination of the results of practice, can clear up the subject to any one's mind. The fœtal and maternal mortality which some have reported in forceps deliveries, and their grave comments and cautions, have tended to create an unjustifiable prejudice against the instruments, and have, doubtless, deterred many from carefully studying their indications and their powers. The ordinary manner of reporting statistics conveys the idea that the deaths were caused by the forceps; than which nothing is more unjust. Examine any series, and see how many of the cases would have been fatal even if the forceps had not been employed; aye, when the forceps were the means upon which the only hope of life was based. Charge the forceps with such death! As well charge one with the death of a drowning person whom he endeavors to rescue, because he could not save the unfortunate. A false estimate has arisen from these statistics, and a fear of the forceps per se has been created.

Let any one examine the cases of those who are fearful of the forceps, and who permit the labor to linger for hours, in the hope of a natural delivery, or until symptoms of local lesion or vital exhaustion alarm them to a necessity for action, and he will read the history of many who most probably might have survived, if the forceps had been used before the incursion of such extreme circumstances. Can any practitioner believe with Ashwell, that the necessity for artificial assistance arises only when "the pains become weak, short, and inefficient, producing no effect on the head of the child, &c.; if the pulse, the countenance, and the general appearance of the woman are expressive of extreme debility and fatigue, a strong presumption is afforded that we have waited sufficiently long to unassisted nature; if, in addition to these symptoms, we have headache, mental inquietude, shivering and vomiting, a pulse of 120 or 130, furred tongue, a hot skin, great thirst, abdominal tenderness, heat and soreness in the vagina and os uteri, we feel assured our patient has approached to a state, from the evil consequences of which instrumental aid will alone deliver her?" If his practice conform to this doctrine, his record would indeed be a sad commentary upon the forceps as a means of saving life, or even abridging the unnecessary sufferings of a fellowcreature. It is not the forceps that makes the way for death, but it is the delay of the accoucheur, which has allowed the head to compress the soft parts at one point for hours, until inflammation is beginning in the maternal tissues, the exhausted uterus is in a state of

atony, and the crippled vitality of the structures is unable longer to preserve their integrity.

Even Dr. Collins seems to have had unnecessary fears in the use of the forceps, for he says: "Generally speaking, so long as the pulse remains good, the bowels and bladder act well, the soft parts remain free from severe pressure, and uterine action continues, so as to cause the presenting part to descend ever so slowly, the patient having no pain in the abdomen on pressure, or local distress, the child at the same time being alive, I am satisfied no attempts should be made to deliver with instruments, and that he who does so wantonly exposes both mother and child to danger." "A prudent use of instruments, in the practice of midwifery, is of great importance: but the necessity alone of freeing our patient from impending or present danger, should induce us to resort to them." Is the amount of suffering endured by the patient during the hours that the presenting part is descending "ever so slowly," and the ultimate evil results which frequently happen, to have no weight in the mind of the accoucheur? Is it judicious to let the struggle go on for hours, simply because nature may be able finally to complete the delivery, when there is good reason to apprehend that the triumph of nature will be achieved at the expense of the future health and well-being of the mother?

There is truth in the opinion of Mr. James Wilson, of Glasgow, that "deficient or deranged uterine action is the chief cause of the difficulties and delays in parturition; and that for one case of protracted labor where the pelvis or the position of the head is in fault, there will be twenty occasioned by deficient or imperfect uterine action."

I remember distinctly my feelings when I first used the forceps on a living frame. It was a first labor, and, after a tedious and harassing first stage, the head had descended to the perineum, and the vertex was pretty fairly applied to the arch of the pubis, the perineum was relaxed abundantly, and the vagina was quite moist, but the pains did not urge the head onward to delivery. The patient was impatient, but I was firm in my purpose not to interfere, because I had read that the forceps was a very dangerous instrument, and that they should not be used until "the ear is within reach for six hours." I looked at my watch again and again, but never did time roll its wheels so slowly. I was satisfied that, if it were possible to deliver her by applying my hands upon the sides of the head and making traction, that the delivery would be productive of no harm. This I could not do. What, thought I at last, are forceps but artificial

hands, and why not use them? I had carefully studied the application of the instrument, and resolved, in this case, to let circumstances, not hours, govern me. The parts concerned were fully prepared for delivery. I applied the forceps, and in a few minutes relieved the sufferer, with perfect safety to herself and child; and I appeal to any candid, unbiased mind to say, whether I did not a good and a perfectly justifiable deed.

We sometimes meet with cases in which the head is apparently ready to pass under the arch, but where it remains stationary, notwithstanding the womb continues to exert itself energetically. There is no malposition nor want of space, yet the strongest pains fail to effect its dislodgment. Cazeaux explains this difficulty by the head becoming so flexed as to destroy the leverage at the occipito-atlantoid articulation, and to allow the spine to be driven down upon the occiput, and thus to create the greatest possible flexion of the head, and prevent the operation of the pains in the direction of the axis of the lower strait. In such cases, (and they occur frequently in first labors,) when all things are ready, I have no hesitation in affirming that the forceps should be used, the ear and six-hour law "to the contrary notwithstanding."

I had commenced to arrange materials for the construction of a table calculated to exhibit the results in forceps operations, so far as the forceps were justly chargeable with those results. I designed to exclude all children who were known to be dead before delivery, all who gave evidence at birth of having been some time dead, all delivered dead by the forceps under circumstances which would have inevitably destroyed them independently of the instruments, &c.; and by this means would have attempted to place the forceps (on the side of the prosecution) "rectus in curia." But the time for their full arrangement could not be spared from my daily duties, and the patience of attentive and kind friends has already been sufficiently tried. However inviting the field to me, the length already attained by this report admonishes me to pause.

I beg to add one more remark under this head. I seldom use anæsthetics, of late years, in my cases, and I carefully avoid them when about to perform any operation; for, in addition to many other cogent reasons which I might detail, I am impressed with the soundness of the views so pointedly uttered by Professor Meigs in his letter to Professor Simpson: "The best guide of the accoucheur is the reply of the patient to his interrogatory, 'Does it hurt you?' The patient's reply, 'Yes' or 'No,' is worth a thou-

sand dogmas and precepts, as to planes and axes, and curves of Carus. I cannot, therefore, deem myself justifiable in casting away my safest and most trustworthy diagnosis, for the questionable equivalent of ten minutes' exemption from a pain, which, even in this case, is a physiological pain."

16. Time between Birth of Child and Delivery of the Placenta.—This subject will be disposed of in a few words. I can give no table of time, because it is an invariable rule with me (if nothing forbid) to effect the discharge of the placenta whenever the tonic contraction of the uterus is firmly established, and the after-birth thereby thrown upon the os uteri. In my earlier years I pursued a different plan, while I thought a tardy expulsion of the placenta secured a comparative exemption from severe after-pains.

And now, gentlemen, fellow-members of the Medical and Chirurgical Faculty of Maryland, I have attempted to fulfill a duty which your kindness induced you to intrust to me as the chairman of your committee. The matter has expanded far beyond my anticipation, and subjects which should have been fully discussed have been necessarily treated in a cursory manner. I have, however, done what time and circumstances would allow. I have dared to hope that this may be a contribution (however humble) to the mass of American facts which is accumulating by the industry and care of our American physicians. If you should deem some of the sentiments to have been uttered too didactically, I can only ascribe the manner to a want of familiarity with writing for the public eye or speaking to the public ear; and, with a sincere desire to learn, can say, " Si quid novisti rectius istis, candidus imperti." I sincerely hope some abler hand may be devoted to the elaboration of these subjects, as with physicians it is emphatically true, that "we must live and learn."

"Nemo enim ad cognitionem veritatis magis propinquat, quam qui intelligit, etiamsi multum proficiat, semper sibi superesse quod quarat."

Bäel Fruit in Dysentery. By A. K. GARDNER, M.D., Author of the "Causes and Curative Treatment of Sterility," &c.

[Read before the Medico-Chirorgical College, July 28, 1859.]

I present this evening a specimen of a new vegetable astringent, perhaps now for the first time seen in this country, but which is very commonly and popularly used throughout the East Indies, where it is called the Bäel Fruit. It is, in fact, the fruit of a plant scientifi-

cally known as the Ægle Marmelos, and is classified under the order of the Aurantiacia. It is, as I learn from my friend, Captain Me-Kenzie, late of the ship "Resolute," a shrub, growing about thirty feet high; for it must be remembered that all vegetation is magnified in size in the East Indies. The fruit, when ripe, is of the size of a large orange, and of a light-green color. The outside is as hard and thick as a cocoanut, requiring as much force to break it. The interior resembles the pulp of an orange, and is of a light-pink color. It is rarely eaten, but a tea is made by scraping out the soft interior and pouring boiling water upon it, which, when cool, forms a most delicious flavored drink, without the addition of sugar or any foreign ingredient, and especially grateful to the feverish thirst of those ill with febrile symptoms, not unfrequently attendant upon dysenteries. Drank thus, it has a slight acid flavor; it is also mucilaginous, being of a thick, syrupy consistency, and possesses an astringent character of scarcely perceptible nature. The fruit is dried for preservation, and, broken up, is placed in bottles, as here present-The exquisite flavor reported to characterize the decoction of the fresh fruit is lost in drying, or at least as seen here; and we have a slightly acid and otherwise unobjectionable taste in the preparation. That its quality may be observed, I have made a small quantity, prepared for the inspection and taste of the college. The direction for its preparation is given as follows: Take one ounce of Bäel fruit and one pint of water; boil over a gentle fire until half is evaporated; strain, and give a wine-glassful whenever the patient is thirsty. The dose for children will vary from a tea-spoonful to a table-spoonful. An extract is also made of the consistency of tar, which has a slight empyreumatic flavor, not particularly agreeable. It is also dried in slices, being the same as the former preparation, in a different form.

It is not proposed to use this to the exclusion of other medicines, but as an adjuvant of considerable utility, not only as an astringent, but as a febrifuge. Should the dysentery depend upon or be associated with any scorbutic tendency, the citric acid in this fruit is well adapted, and it is perhaps to this quality that a great part of its much-vaunted success in Calcutta and the Indies generally is to be attributed.

In the four cases where I have myself administered it, I have been inclined to think well of its action, yet I have not fully made up my mind how great or exactly what are its qualities. As a simple astringent it is not so powerful, if the effect upon the mouth is any test, as hæmatoxylon or other barks and woods, infusions of which I have been

accustomed to prescribe to quench the often excessive thirst. Dr. Stephen H. Ward, Physician to the Dreadnought Seamen's Hospital, says, in a paper in the London Lancet of November 14, 1857, upon Dysentery, "Of all the vegetable astringents, I have found none equal to a strong decoction of the rind of the Bäel fruit of Bengal;" which testimony, he says, is corroborated by Drs. Royle, J. Hooker, Wight, Mr. R. Martin, and others-medical men whose experience enables them to speak to the subject. Dr. Hooker says in a letter, "I have given the Ægle, and seen it used with great effect." The decoction is now entered in the Dreadnought Pharmacopæia, as Decoctum Æglis, and is made by boiling down three ounces of the dried rind of the fruit, with a pint and a half of water to a pint. Of this an ounce and a half is given, with a few drops of laudanum, three times a day. Dr. Ward continues: "Although I have decidedly found this the most useful astringent in the purely chronic or milder forms of dysentery, still we must not be wedded to any one remedy, but ring the changes, if necessary, upon several."

New York, 141 East 13th Street.

On Legal Restrictions of the Sale of Poisons, more especially of Arsenic. By Benjamin Lee, A.M., M.D.

The tardy course of American justice has not yet awarded his merited punishment to the wife-poisoner, Stephens; but his case, and others of recent occurrence, have not been without good results, in that they have begun to awaken the public mind to the necessity for more stringent laws than the paltry one which now disgraces the political code of the State of New York, for the restriction of the sale of poisons. A careful examination of reported cases in Europe, as well as in our own country, undertaken about the time of his trial, impressed me very deeply with the almost criminal neglect of our law-givers in leaving the sale of all poisons, indeed, but more particularly of that most deadly one of which he availed himself, so utterly without safeguard.

A number of properties combine to make arsenic by far the most dangerous article in the whole category of poisonous substances.

1st. Its similarity to flour and to powdered white sugar renders it extremely liable to be used by mistake for those articles of food.

2d. Its color, its absence of color and of taste in solution, the small quantity (from two to three grains) which is necessary to produce

death, make its intentional introduction into articles of food comparatively easy, and liable to escape suspicion. Laudanum and other preparations of opium are dangerous poisons, but their taste, and, in the case of some of them, their color, would almost inevitably lead to a suspicion of the presence of some improper substance, wherever they may have been introduced.

3d. The universal knowledge of its deadly qualities makes it the ready agent of the ignorant for the purposes of revenge or of suicide; although the victim of despair ends his troubles perhaps almost as

often by means of a stupefying draught of laudanum.

A single drop of nicotine is sufficient to produce almost instantaneous death; but Bridget in the kitchen and James in the pantry are not aware of the existence of this article, while they, and John the stable-boy, too, though he knows little beyond currying a horse and sweeping a stall, do, at least, know that arsenic will kill both mice and rats, and there are few minds whose powers of ratiocination are not equal to carrying the analogy a step or two further till they reach their fellows, and masters and mistresses. For one Dr. Palmer insidiously destroying his victims with strychnine, we have a hundred Stephens and Margaret Burkes.

4th. No poisonous substance is in daily use so commonly, and under so many different forms.

Its constant use as a means of ridding ourselves of vermin has already been alluded to. The ordinary fly-paper of the shops is saturated with a solution of cobalt, which is one of its natural oxides.

As a coloring matter, both yellow and green, as it is compounded with sulphur or copper, children may eat it in quantity in confectionery, or lick it off from toys; or the air of our chambers may be poisoned by the rich paper which adorns its walls, or by the noxious fumes which are exhaled from the flame of our hard and polished candles. Ladies may snuff it from the fur of their muffs, which it was intended to preserve; or if they are weak enough, and unfortunately the number of such is not small, may take it directly, both externally and internally, at the hands of those pestilential women who make it their business to tell fortunes, and "impart to the female cheek the combined tints of the lily and the rose."

5th. Its cheapness places it within the reach of every one, no matter how poor.

Experience proves that it is a not less dangerous enemy of human life, and ready agent of revenge or malice, than a knowledge of its properties would lead us to suppose.

194

It was computed that in England, in the course of two years, (1835-6,) 185 deaths were caused by it, being equal to those attributable to all the preparations of opium together, and more than those caused by all other poisons combined. And of the fearful extent to which the murderous use of this and other less well-known poisons has of late years increased in our country, no better proof is needed than the fearful list which might be culled from the columns of our daily journals during the past twelve months. Wives, husbands, children, parents, have alike been sacrificed with remorseless cruelty by its too easy means; while as I write, the Daily Times of this morning (Aug. 3) lies by me, containing a list of no less than six recent suicides by poisoning.

The necessity, then, for legislation upon the subject appears too patent to need further proof. Crime with us is generally owing not to the want of good laws, but to the failure to execute them. In this case, however, the statute-book itself is manifestly at fault. We do greatly need more stringent laws for the restriction of the sale of poisonous substances, and especially of arsenic.

To say that proper legal restrictions on the sale of poisons would be considered as infringing on personal liberty is, I think, giving the people of our State too little credit for common sense, and too much for foolish love of license, and the improbability of such a result is proved by two facts: First, there already exist in this 'State restrictions on the sale of gunpowder and of spoiled meats and vegetables, and on the use of steam-boilers, which no one ever dreams of considering oppressive, although they are certainly not more plainly indicated than those under consideration. Second, as I shall presently show, American people are living contentedly in other States, which have been blessed with a more enlightened and progressive legislature, and where, as a result, quite stringent regulations of this commerce are in force.

In order, however, that legislation may be effective and wise, it is necessary to see what other States and countries have enacted; what the wisdom of other legislatures has evolved upon the subject. And first, among the other States of the Confederation, Maine and New Hampshire agree in requiring the following poisonous substances, viz, arsenic, corrosive sublimate, nux vomica, strychnine, and prussic acid to be sold (except upon prescription of a physician) only under the following restrictions: 1st. The bottle or package must be furnished with a label bearing the name of the article, and the word "Poison" distinctly upon it. 2nd. The name of the purchaser, together with

the quantity bought, must be entered upon a register kept for that purpose. 3rd. None of these articles may be placed on, or within 200 rods of, a highway, for the purpose of killing noxious animals. The penalty in the former State may be \$50, in the latter \$100.

Michigan, Wisconsin, Oregon, Iowa, and Missouri also require labels for substances usually called poisonous, and the last-named State provides that they shall not be sold to minors or slaves. The penalty in the three first States may be \$100.

The statutes of Massachusetts provide that any person selling arsenic, strychnine, corrosive sublimate, or prussic acid, except upon the written prescription of a physician, shall keep a record of, first, the date; second, the article sold; third, its amount; and fourth, the name of the purchaser. Penalty not more than \$50. Any purchaser giving a fictitious name is liable to a fine not exceeding \$50.

But the Ohio code is more complete on this subject than that of any other State in the Union.

It provides that no person shall sell or give away any poisonous substance, save upon the prescription of a physician, except under the following restrictions:

- I. He shall register in a book kept for the purpose:
- 1st. The name, sex, and color of the purchaser.
- 2d. The quantity purchased.
- 3d. The purpose to which the purchaser intends applying it.
- 4th. The day and date on which the purchase was made.
- 5th. The name and residence of the person for whom it is purchased.
  - II. The bottle or package shall be labeled "Poison."
  - III. Such articles shall not be sold to minors.
- IV. Further, with regard to arsenic alone, that no quantity of this substance, less than one pound, shall be sold, except upon prescription of a physician, until it shall have been mixed with soot or indigo, in the proportion of an ounce of soot or half an ounce of indigo to an ounce of arsenic.

The object of this last very valuable clause is to prevent the arsenic in small quantities, as it is often kept for the destruction of vermin, being mistaken, as it so frequently is with fatal results, for flour or powdered white sugar; and also to prevent its intentional introduction into articles of food, since the black or blue color of the mixture would at once lead to the suspicion of the presence of a foreign substance.

Now, as a counterpart to the enlightened legislation of Ohio, and

the careful precautions of Massachusetts, of Maine, and of New Hampshire, what law do we find for the protection of the citizens of the Empire State against the deadly arts of the poisoner, and the scarcely less dangerous mistakes of careless shop-boys and ignorant servants? Nothing but this meagre prohibition, which exists, as I have shown, in our youngest and wildest border States, and whose enactment is almost as recent as their admission:

"Any person who sells or delivers any poisonous substance, without having the word 'Poison' written or printed upon a label attached to the phial, box, or parcel in which the same is so sold or delivered; or who sells or delivers any tartar-emetic without having the true name thereof upon such a label, is guilty of a misdemeanor. Any person who violates this section, or whose partner, clerk, or servant does so, is liable in damages to any party injured in consequence thereof."—2 Revised Statutes, 877, § 25.

The utter inadequacy of this restriction to abate the evil scarcely needs comment. Leaving our own continent, let us see in what light European legislators have viewed the subject.

England, although not better provided than our own State with regulations restricting the sale of most poisons, has recognized the extreme danger of the unrestricted sale of so deadly and so commonly known a substance as arsenic, and provided by an Act of Parliament of June, 1851, that no arsenic should be sold, except upon the prescription of a physician, save under the following restrictions: The name and address of the purchaser are to be recorded, and the sale must be made in the presence of a witness. In addition, if a less quantity than 10 lbs. be sold, it must be colored. The penalty for the infraction of these laws shall not exceed £20.

In Ireland the laws on this subject are more stringent than in England itself, possibly because they were found more necessary. Statutes of that kingdom, which have been in force since the reign of George III., provide that, 1st, neither arsenic nor any of its preparations shall be kept in the same place with any other medicines; 2d, that if a less quantity than one pound is sold at any time, the quantity and the date shall be entered upon a register, to which the purchaser must sign his name. If not personally known to the seller, the signature must be certified by competent witnesses. This register is to be considered evidence after the death of the seller.

Great exertions have been made in England for the past ten years to procure a more stringent and comprehensive law on this important subject, and the subject has been several times before Parliament. It is probable that a very short time will elapse before sufficient meas-

ures will be taken to render the sale of these noxious articles much more difficult, and less dangerous to the public welfare.

It is, however, upon the Continent of Europe, where, to the shame of liberty, (or of those who abuse it,) be it said, all measures regarding the preservation of human life from danger, resulting from crime or from carelessness, are more carefully concerted and more rigorously enforced than in either England or America, that we find laws on this subject best fitted to diminish the evil; and of all the European States, Prussia and France are those whose provisions are most stringent and best devised. I give an abstract of the statutes of the latter country on this subject, as a type of those to be found in most of the continental codes.

These laws were passed upon the 29th of October, 1846, and were accompanied by a specification of articles considered to fall under the title of "Poisonous Substances." This specification was uselessly long and cumbersome, and was subsequently, on the 8th of July, 1850, so abbreviated and modified as to contain the following articles:

Hydrocyanic acid.

Poisonous vegetable alkalies and their salts.

Belladonna, extract and tincture of.

Cantharides-whole, in powder, or tincture.

Hemlock, extract and tincture of.

Chloroform.

Cyanide of mercury.

Cyanide of potassium.

Digitalis, extract and tincture of.

Tartar-emetic.

Arsenic and its preparations.

Hyoscyamus, extract and tincture of.

Nicotine.

Nitrate of mercury.

Opium and its preparations.

Phosphorus.

Ergot.

Stramonium, extract and tincture.

Corrosive sublimate.

The first provisions relate to the use of such poisonous substances on a large scale, and require any person, wishing trade in any one of them, to make a declaration to that effect before the mayor of the township in which such commerce is to be carried on, which declaration must be registered. The same requirement applies to persons

wishing to use them in manufacture. Certificates of such declaration are given to the declarant, and in case of removal these certificates must be renewed.

Such poisonous substances are to be delivered only to persons who can furnish such certificate, and only upon a written demand from them. All such sales must be immediately registered at the mayor's office.

All other sales of such substances are supposed to be for medicinal purposes, and are to be made only by apothecaries, and only upon the written prescription of a physician, surgeon, health officer, or licensed veterinary surgeon.

Prescriptions are required to be signed, dated, the size of the dose to be stated in letters, (that is, not in figures or symbols,) and the mode of administration to be specified.

These prescriptions must be immediately entered upon a register, kept for the purpose. They may be removed from the apothecary's keeping only with his seal appended to them, and an endorsement stating the day of the sale or delivery of the articles specified, and the corresponding register number.

This register is to be kept at least twenty years, and is open to the inspection of the authorities. The envelope in which the poisonous article is put up must be labeled with the name and place of business of the apothecary, and it must be stated whether the article be for external or internal use.

The following special restrictions are placed upon the sale and use of arsenic:

Arsenic and its compounds may be used for other than medicinal purposes, such as the preservation of animal substances, the destruction of vermin, &c., only when mixed with other substances, which shall prevent mistake and accident. Such mixtures are allowed to be sold only by apothecaries, and only to persons known to them and residing in the same township. The sale and employment of arsenic for the "liming" of grain, for embalming bodies, and for destroying insects, is forbidden.

All such poisonous substances must be carefully kept under lock and key.

Then follows a provision in which, or its kind, our own statute-books are painfully deficient. We make good laws, and leave them to the vigilance and honesty of our officers alone to be enforced. Now, great as is the vigilance and undoubted as is the honesty of all our executive functionaries, from Governor to policeman, experience

with us, as well as in France, proves the necessity of a spur and incentive other than the simple love of discharging well their duty, to drive officials into the strict enforcement of the laws.

The clause referred to provides that the Mayor or Police Commissioner of each township, with a physician appointed by the Prefect, shall, at stated intervals, visit the shops of apothecaries, and the establishments where these substances are made or sold, examine the registers, and assure themselves by any other means that they may think necessary, that these ordinances are strictly complied with.

In the department of Les Landes, in France, it is additionally required by an edict of the Prefect that all poisonous substances shall have red labels attached to them when sold; the labels for other sub-

stances being white.

It would be difficult to imagine a more thorough or effectual system of laws upon the subject than these of the French code; and with slight alterations suggested by the difference of locality and form of government, they might almost be adopted bodily into our own statute-book. The main features of such an act should be as follows:

1st. A specification of articles recognized as poisonous by the law; this would require to be much more complete than those generally given in the statutes of other States, but not necessarily so full as the list of the French code above given.

2d. Manufacturers of, and wholesale dealers in such articles, and persons using them in manufacture, should be required to file a declaration of such purpose of sale or manufacture, and certificates of declaration should be necessary to trade. Each sale should be publicly registered.

3d. None but apothecaries should be allowed to retail such articles.

4th. Such articles should be delivered only upon the prescription of a regularly educated physician, who has been licensed according to law.

5th. Such prescriptions should be registered with all the concomitant facts necessary to make said registration available testimony in case of need.

6th. The bottle or envelope containing the article should be labeled with a label of a peculiar color, reserved by law for such articles, distinctly marked "Poison," with the name of the article. The bottles might be so made (as they are said to have been introduced in England recently) that the contents can only escape by drops. The label should state whether the article is for external or internal use.

7th. Arsenic in greater quantities than medicinal should be so mixed

with colored substances as to prevent its being mistaken for articles in daily household use.

8th. It should not be sold to minors, nor to unknown and irresponsible parties.

9th. A competent committee should be appointed, whose duty it should be to visit semi-annually all places where such articles are sold or manufactured, and assure themselves that the laws are complied with.

10th. The penalty for the infraction of any of these restrictions should be not less than \$200.

I have thus given, of course, only an outline of a system of laws on this important subject, the details of which are to be filled up, and subject to modifications and amendments. But I am satisfied that the passage of an act founded on similar principles would be a saving to the State of considerable expenditures, as well as an immense protection to human life.

2 West 36th Street.

# Accidents arising from the Employment of Arsenical Greens.

Dr. Beaugrand has presented a report on this subject to the Committee on Hygiene in the fifth arrondissement of France, the substance of which we shall embody in this paper.

These greens are: Scheele's green, discovered, during the last century, by the distinguished chemist of that name, prepared by precipitation from a salt of copper with an alkaline arsenite; and Schweinfurth green, discovered at Schweinfurth in 1814, by Rulz and Sattler, although not scientifically known in France until 1829, through the notes of Braconot and Liebig; prepared by mixing boiling solutions of bibaric acetate of copper and arsenious acid. They are employed in the manufacture of paper-hangings, on account of their beautiful color.

They are capable of producing poisonous effects in three ways:

1. When they are brought directly in contact with the digestive organs;

2. When their emanations or powders are introduced into the lungs;

3. By contact with the skin.

1. The effects of arsenical greens following their introduction into the digestive organs. These are similar to those of other arsenical compounds, as has been shown by the following: The excellent report of Chevallier and Duchesne, (Ann. & Hygiène, 2d Series, ii., 1854,) in

which the authors have collected various cases of poisoning from substances colored with arsenical greens, such as bonbons, &c.; the report of Dr. Martini, of Wurzen, on the poisoning of a large number of children of that village who had eaten small figures of gingerbread thus colored, (Ver. der Zeitschr., viii., 2, 1850, and Schmidt's Jahrb., lxxi., 357;) an observation of Dr. Schultz-Henke on a child poisoned from having sucked a piece of glass thus colored, (Schmidt's Jahrb., lxxxiii., 173;) the facts cited at different times by Dr. A. S. Taylor, and his repeated complaints on the silence of English legislation as regards the sale of poisons, (Brit, and For. Med.-Chir. Rev., xviii., 551, 1844, and Guy's Hospital Rep., vii., 1851.) Dr. Meurer has also made a series of experiments on living animals. Schweinfurth green, in the dose of 10, and even 5 grains, has poisoned rabbits in the space of six hours; and the arsenic has been detected in the liver, while no traces of copper were found. A dog, to whom first 10 and then 20 grains were given, was saved by vomiting. Another dog, not so robust, died after the administration of 5 grains, and no arsenic was detected in the liver. The same results followed the use of Scheele's green. Some comparative experiments being made with a salt of lead-the chromate-a rabbit took each morning, for three days, 10 grains, without any symptoms except progressive wasting away, dying on the third day.

According to Meurer, the arsenites of copper are speedily fatal, in consequence of their rapid decomposition in the stomach, setting free the arsenic. The copper, instead of aggravating the poisoning, rather tends to diminish the effects, on account of its emetic properties. Whenever a cure has been effected, it has been, in most cases, owing to the small amount of the poison ingested; or, in some, by the emesis which so speedily took place.

Effects produced by emanations or arsenical powders proceeding from paintings or paper-hangings in rooms.

Attention was first directed to this, in 1839, by Gmelin. Some years afterwards, a very distinguished Prussian physician, Basedow, made it the subject of two very remarkable papers. In the first, he reported several examples of veritable poisoning observed in persons who occupied chambers painted or papered with arsenical green: in the second, he examined the results of an investigation instituted in Prussia, in consequence of his first observations; and the numerous and singularly confirmative facts obtained in this investigation justified the measures adopted by the Prussian Government, in prosecuting the employment of this poisonous color in the decorations of rooms. Analogous observations had been made in Sweden by Carlson and

Malmsten; and, shortly after their publication, a report of the College of Health at Stockholm interdicted the use of arsenic green for painting and paper-hangings.

Lately, other facts have been published in other parts of Germany; and thus, to those of Basedow may be added those of Hoffmann and Acheron, and of Birkmeyer of Nuremberg, one of the editors of the Journal of Canstatt, who observed some accidents in his own family from this cause.

In England, where such greens are extensively used in paper-hangings, Dr. Hinds, of Birmingham, relates three cases under his own observation, (Med. Times and Gaz., 1857, i., 177 and 250;) Halley publishes his own case, (Ibid., Jan. 16, 1858;) and Whitehead announces a case, (Brit. Med. Journ., Sept. 25, 1858.)

The phenomena observed in the cases reported are: anorexia, sometimes vomiting and diarrhœa; most frequently very acute irritation of the eyes, nasal fossæ, the throat and bronchia, with hoarseness, dry cough; eruptions of different kinds; erratic pains, (pseudo-rheumatism,) vertigo; and, in addition to these, debility, incomplete paralysis of movement, (paresia,) affecting particularly the lower extremities, various injuries to the spinal cord, an earthy discoloration of the skin, marasmus, &c. These symptoms resist, with great pertinacity, treatment: being allayed and reproduced according to different circumstances, and only yielding completely when the patients gave up their rooms or changed their decorations. Those most easily affected are young children, then females, and then persons who live mostly confined within their houses.

How do such emanations produce poisoning? There are two theories: A, the poisonous effect is produced by gaseous emanations (probably arseniureted hydrogen) proceeding from chemical decomposition; B, it arises from the absorption, in the digestive and respiratory apparatus, of pulverulent particles detached from the pigment by efflorescence.

The first hypothesis was originated by Gmelin, and supported by Basedow and some others, who detected the odor of arseniureted hydrogen or cacodyle in apartments where the inhabitants had been affected. The conditions favorable to the decomposition are dampness of walls, the action of respiration on the air in the room, the different exhalations given off in occupied rooms, the odors from the kitchen, and certain meteorological influences.

Kramer, of Germany, has combated this theory, by the aid of chemical experiments. He failed to detect arsenic by passing very large quantities of air, that had traversed a vessel containing arsenical

greens mixed with paste, through proper detective solutions. The same failure resulted in the substitution of hydrogen, or of the air of a chamber painted with the poisonous color: the reagents detected nothing, and there was no alliaceous odor. The experiments of Phillips and F. A. Abel were also negative. These experiments are, however, wanting, in that the air of a room, in which poisoning had been produced, was not experimented upon.

The other hypothesis, which attributes the poisoning to pulverulent particles detached from walls or papers, is very probable, especially when it is recollected that, in the countries where these accidents have occurred, wall painting has given place to the use of paste, and that the coloring matter is so thickly laid on as to give a velvety appearance, and that glazing is not employed. This opinion has been specially supported by Hoffmann and Reimer, and Kleist, a Prussian pharmaceutist, who admits the two modes of poisoning, remarking the absence of glazing in the ordinary employment of the beautiful green color-(Farbe der Hoffnung)-which the Germans, and particularly the poorest classes, apply not only to the decoration of their chambers, but also to a number of articles and utensils in domestic Kleist has seen, in chambers thus decorated, the furniture covered with a very fine green dust. Phillips also holds to this theory. Let us also remark that, in some cases, the state of efflorescence of the color has been noted, and that the influence of this dust has been made manifest through accidents to workmen who have scraped the walls of which we speak; and, recently in Paris, with costumers who were making a ball-dress colored green by the arsenite of copper, which became detached in a pulverulent form.

3. Local Effects of Arsenical Greens.—Vesicular and pustular eruptions, followed sometimes by very painful ulcerations, erythematous swellings, &c., are produced on the skin, when brought into contact with the arsenites of copper. These phenomena, purely local, observed on workmen who prepare arsenical green, and on those who dress and glaze colored papers by means of this substance, were first described by Dr. Blandlet in 1845. This treatise, containing the principal facts concerning these eruptions, was followed by Chevallier's paper in the "Annales d'Hygiène," (1847,) in which it was shown that the accidents noticed by Blandlet were real, although probably exaggerated. These researches were overlooked or forgotten, when M. Follin published a very complete and detailed account of the different affections observed in a workman occupied in the preparation of Schweinfurth green. This gave occasion to Imbert Gourbeyre to

show, with the aid of numerous cases quoted from French and other physicians, that eruptive affections are not rare in arsenical poisoning, and that they have been known for a long time.

Blandlet, however, did not pretend that he had first noticed these affections, and he says in his paper, "It is not rare to see coryza and expectoration at the commencement of internal poisoning; swelling of the nose and lips was observed in the assassin, Souffard; papular and vesicular eruption is common both in internal and external poisoning." Dr. Brochmann (1859) has written of the eruptions that show themselves in workmen employed in the roasting of the arsenical ores of the Harz Mountains; and Dr. De Pietra-Santa has communicated a paper to the Academy of Sciences on the effects of green and other painted papers.

In some workshops of artificial-flower manufacturers, there are employed, instead of artificial pieces in paper or cloth, the hulls of natural grains dried. These are soaked in green coloring material, which is often Schweinfurth green prepared with oil of turpentine as for ordinary painting; they are mounted and arranged, by means of silk thread, on flexible brass wires, in order to form waving grapes, intended as an ornament for ladies' bonnets. These articles, thus colored, being employed by the workmen when they are yet moist or covered with a powder of the same green sifted on them, communicate a deposit of the arsenical color, more or less thick, on the fingers, which is then continually brought into contact with the face, neck, &c., and on these parts the eruptions appear. The soakers (les trempeurs) are subjected to the same influences, and the contact of the fingers with the genitals, in urinating, produces even there the same eruptions.

The author cites a number of cases illustrating these effects, and says that the workmen are so indisposed to submit to such inconveniences, that they abandon the business after a few weeks' or months' trial, so that the *personnel* of such an establishment is always changing.

The important question now comes up, Are not persons wearing such decorations liable to similar affections? Beaugrand failed to produce any unpleasant effects in his own case, by keeping on his forearm one of these grapes for three days, although it was moistened every morning; but the coloring matter had been prepared with oil of turpentine, which prevented its removal by water.

The arsenites of copper seem to act on the skin in a manner peculiar to them, and to produce eruptions analogous in appearance to the specific eruptions of syphilis. In this way they do not act as poisons, but as local irritants.—(Gaz. des Hôpitaux.)

# Arsenical Paper-Hangings.

As an appendix to the article on Arsenical Greens, from Dr. Beaugrand's report, we ask attention to some interesting cases gleaned from the columns of the Medical Times and Gazette. These will show how dangerous is the use of arsenical greens in the manufacture of paper-hangings, notwithstanding the silly assertions of those who declare that no injury can result to the health of persons occupying rooms decorated in this way, because "no fumes of arsenic would be given off even in a temperature of 140° Fahrenheit." The blunder arises from the notion that the mischief is produced by arsenical fumes, which are only given off at about 400°, whereas the danger proceeds from the inhalation of the dust, given off from the paperhangings, into the lungs of the sufferers. It is a matter, also, of small moment whether the arsenic enter the lungs in the condition of vapor or as a solid body; the main object of inquiry is whether paperhangings, on which arsenical colors are employed, are injurious to health.

Dr. Alfred Taylor (Med. Times and Gazette, Jan. 1, 1859) mentions the case of a gentleman, whose library walls were covered with arsenical-green paper, suffering "for some time from chronic inflammation of the eyes, especially affecting the conjunctiva of the eyelids." Suspecting that the affection was due to the pigment, he had the paper removed, when the inflammation disappeared, but afterwards on dusting some books, in a book-case belonging to the room, on which the dust had settled for two or three years, the disease returned. A specimen of this dust, weighing one grain and a half, being removed from the books by a feather, was of an olive-green color, "and under the microscope presented the appearance of fibres, with numerous particles of various colors, chiefly of a grayish-black. By Reinsch's process a portion of the dust yielded a deposit of arsenic." A similar examination of some dust from the cases of an instrument-maker, whose shop was covered with unglazed arsenical paper, amounting to 450 grains, detected the presence also of arsenic. "One hundred and fifty grains of this dust were examined by Reinsch's process; and enough metallic arsenic was obtained from it to coat about ten square inches of copper foil, in addition to a piece of copper gauze." These facts justify the writer in the statement that the air of a room whose walls are covered with arsenical paper-hangings "is liable to be charged with the fine dust of the poisonous aceto-arsenite of copper."

W. B. Kesterven (Medical Times, Jan 8, 1859) mentions a case which corroborates what Taylor has advanced. A lady, for some ten

or twelve years, had frequently suffered from severe attacks of intestinal derangement; but during the last six months she has been free from them. The room had previously been papered with arsenical paper-hangings, which furnished metallic arsenic under Reinsch's process; but these had been removed, and those of another color were substituted in their stead, and the presumption is fair that the poisonous dust from the walls was the cause of the sickness.

Dr. Rooke (Medical Times, Jan. 29, 1859) was induced to examine the green wall-paper of his dining-room, "as one member of the household had, for some months since it was put up, been constantly suffering from obscure gastro-intestinal symptoms, not referable to errors of diet, or any hitherto known cause. On collecting some of the dust from the tops of the picture-frames, ledge of doorway, etc., (to the amount of between two and three grains,) and submitting this to Reinsch's test, a piece of fine copper gauze, about an inch square, became covered by an iron-gray metallic coating after some twenty minutes boiling, and the metallic crust was converted into crystals of arsenious acid in the usual manner, and gave the ordinary reactions."

Dr. J. J. Wright (Medical Times, Feb. 12, 1859) directs attention to the injurious effects of such paper in his own library, producing attacks of colic, chronic sore throat, tenderness about; the margin of the eyelids, &c. The paper in this case was partially glazed, but still not sufficiently so to prevent the detachment of the pigment in a pulverulent form. The paper-hangers always complain, when obliged to use such paper, "of redness and watering of the eyes, stuffiness and irritation of nose, soreness of the lips, and an uncomfortable feeling about the throat."

In some green flock paper examined by Taylor, he found "more arsenic in a square inch of the green color than is commonly found in the whole of the liver of a person that has died from that poison."

It is not improbable that every practitioner in a city will have some fact, treasured up in his own experience, which will corroborate those given above. The question is whether, with such knowledge in our possession, we shall quietly submit to the poisoning of families by the use of arsenical paper-hangings, or use every exertion to inform the public on this subject, and, if possible, provoke some legislation in the way of prohibiting their use. It seems to us that the latter is the course to be adopted by the medical profession, as being ex officion health officers of every community. If the sale of poisons should be regulated by law, then surely the use of poisons in any way so as to

endanger health should be prohibited. We should be pleased if any member of the profession, possessed of information on the subject of arsenical paper-hangings and their injurious effects, would communicate this to the public, so that the interest may be kept alive until our legislators shall prohibit the use of arsenic greens for any purpose where they can produce danger.

1. H. S.

Case of Strangulated Congenital Inguinal Hernia—Operation—Removal of large Mass of Omentum—Recovery. By REED B. BONTECOU, Troy, N. Y.

JANUARY 26, 1858, 10 P. M.—Was called to see W. R.—, a lad aged thirteen years; found him lying on his back in bed, with trunk bent forward, legs and thighs flexed like one with peritonitis; general tenderness of the abdomen; scrotum distended to the size of a large orange, of a regular oval shape, red, shining, and painful to

the touch; the swelling extending into the inguinal canal,

The history of the case was given to me by his parents, as follows: He had a congenital hernia of the left side, which occupied usually the scrotum. On the 23d inst. he went a mile from the city, and while there exercising on his skates, experienced a severe pain in the hernia, accompanied with nausea and faintness; he laid down on the ground and slept some hours, uncovered, and in an exposed situation. At evening he returned home and went to bed, and remained without much complaint, until I saw him. The boy had not had any passage from his bowels since the 22d inst.; and oil which was given on the day before I saw him had been rejected; in fact, vomiting had continued occasionally from the 23d. The tumor was very tender, and efforts at taxis, which were gently made, were painful and unsuccessful. Prescribed Opii pulv. 3 grs., every three or four hours, and cold wet applications to the inflamed tumor.

27th, 8½ a. m.—Patient complained of pain all over the bowels, which were distended; had stercoraceous vomiting during the whole night, and probably rejected the powders. The tumor was larger, more livid, and ædematous; increased tenderness in the hernia and left iliac region. An injection had been administered without success; urine had been passed. 10 a. m.—The patient was placed on the table, and put under the influence of chloroform, by Dr. Brinsmade, Drs. Seymour, Lewis, and Whiton assisting. I carefully cut through the envelopes, which were tightly drawn over the mass, and opened

the tunica vaginalis, which was filled with a mass of omentum, black, with infiltrated and coagulated blood of the size of the fist, and a portion of intestine several inches in length, all adherent to the sac by recent adhesions; these were detached by the finger and handle of the scalpel, and some clots of blood removed. The stricture was found to be in the neck of the sac, and was relieved by several incisions. The intestine was then drawn down, and although rough and dark colored, was deemed sufficiently good to return, which was carefully done. The omentum was so much broken up by infiltrated clots as to render sloughing highly probable; a needle armed with strong double ligature was therefore passed through it near the stricture, and the mass thus included in two portions was removed by the knife, the ligatures were made fast outside, and the wound closed with sutures and straps of adhesive plaster.

10, P. M.—The patient has been kept under the influence of opium all day; has no pain; vomiting had occurred several times during the day, but was no longer stercoraceous; the 3 gr. powders of opium to be continued every six hours.

28th, 9 A.M.—Pupils contracted; pulse 130; respirations slow; expresses himself comfortable; passed urine and voided some flatus twice since last visit; no tympanites or tenderness of the abdomen; ordered wet cloths to the wound, to take 3 grs. of opium every five hours, and to retain the recumbent posture. 8, P.M.—No change; patient continuing comfortable; opii pulv. 3 grs. every six hours.

29th, 9 A. M.—Is considerably influenced by the opium, as evidenced by the contracted pupil and slow respiration; pulse, however, keeps up, rating 120 a minute, and some little tenderness from the wound to the left iliac region; continue same treatment.

8, P. M.—Patient somewhat narcotized, but easily roused and rational; pulse 130; respirations 14; sweating; has passed no urine, and feels no desire, and there is no dullness over the pubis; abdomen more distended and tympanitic than before. Opii pulv. 2 grs. every six hours; warm fomentations, sprinkled with turpentine, to be applied to the bowels.

30th, 10 A.M.—Patient appears comfortable; has vomited some greenish matter; pulse 132; skin moist; abdomen much distended and tympanitic; but little pain complained of. The wound is discharging a little, and looks well; has passed urine freely, night and morning, but no evacuation whatever from the bowels. Prescribed infusion of senna with aromatics, and ordered lard and turpentine rubbed on the bowels, to be followed by warm fomentations. The opium to be dis-

continued till further notice. 8 P. M.—The rectum has been emptied by injections, and some flatus passed, but no evacuation of the upper bowels yet; no tenderness, and much less distention of the bowels.

31st, 10 A. M.—General appearance of patient good; some gaseous distention, of the belly, with but little tenderness, however, and that confined to the left iliac region; his tongue is cleaning off, and wound discharging healthy pus; pulse 77; injection to be administered, and infusion of senna and aromatics continued.

6 P. M.—Pulse 75; abdomen soft, and not tender; has had an evacuation, after the use of several injections; skin moist; general condition good.

Feb. 4th.—The boy has since last notice been very comfortable, and has retained the dorsal decubitus. His bowels have been voluntarily moved daily. The wound continues discharging, and is nearly healed. The scrotum and wound are supported by adhesive plaster, and over all a poultice.

6th.—His bowels were moved this morning three times from oil, which was prescribed yesterday; wound healed except at the ligatures, which are still firm.

10th.—Patient feels well enough to go about; the ligatures came away with the dressings, and the wound is closed. Straps applied to scrotum as support.

12th.—The patient can walk well; there is no descent of the intestine; the stump of omentum can be felt obliterating the ring. Discharged cured.

Use of Sulphate of Copper and Opium in Diarrhaa, occasioned by Dentition. By Dr. EISENMANN, of Würzburg.

During first dentition children are frequently affected with diarrhoea. It is often so slight that parents do not regard it as a disease, and leave it to the action of nature only; at other times, however, especially when dentition coincides with weaning, the evacuations are copious, and the diarrhoea passes into the chronic state. Then the patient becomes remarkably thin, and nervous symptoms of all kinds arise; sometimes that morbid condition is developed which has been confounded with acute hydrocephalus, but which Marshall Hall has designated by the name of hydrocephaloid. When it has passed into the chronic state this diarrhoea is frequently fatal, the little patients dying in marasmus.

I have found a medicament, the use of which has been attended by extremely favorable results in a great number of cases of these diarrheas.

In the autumn of 1838 Dr. Rœssel, Bavarian Aide-Major, then in garrison at the fort of Oberhaus, consulted me about a child in a low state from a diarrhœa of dentition. Sophie Krick was of delicate health; she commenced to cut her teeth with her second year. After the appearance of the first teeth she was taken with a diarrhœa, to which the parents at first paid no attention; but soon afterwards the evacuations became serious, persisted for three months, and so reduced the child that only skin and bones remained. She was continually in a state of coma vigil; pulse very frequent, and hardly perceptible; no appetite, and constant thirst; in a word, her condition appeared desperate. Upon my proposition, Dr. Ræssel prescribed the sulphate of copper, associated with opium, in the following proportions:

Sulphate of copper, gr. \(\frac{1}{4}\).

Opium, \(\frac{1}{12}\).

Sugar, q. s.

Recommending three powders a day to be given.

The first four days there was a marked amendment, the evacuations became less frequent and less serious, and three days after the little patient commenced to convalesce. The diarrhœa ceased, the appetite returned, and digestion was re-established; the strength and the normal size of the body sensibly increased, and four weeks after the cure was completed. This case created a considerable sensation in the neighborbood, and soon after Dr. Ræssel had two similar cases to treat. He called me in consultation, and we agreed to employ the same means, and the results were equally favorable in the two cases.

In 1840 I had an opportunity to observe a fourth case of this diarrhoa at the fort of Oberhaus. The little patient presented the same symptoms as those I have just mentioned, with this difference, that vomiting still persisted, and that the disease had only continued for fifteen days. The emaciation, however, was very marked, the abdomen tumid, and sensitive to pressure; appetite bad, and great thirst; the respiration was accelerated, and there were mucous râles, without any other symptom of a pulmonary lesion; countenance pale, and a little tumefied, the expression indicating apathy. I prescribed the sulphate of copper with opium, according to the formula given above, and twelve of these powders brought about in four days convalescence, which was very short.—Bulletin Générale de Thérapeutique.

Monthly Summary of Cotemporary Medical Journalism. By O. C. Gibbs, M.D., Frewsburg, N. Y.

Under this head, we propose to give a condensed idea of the more important original papers that appear in the regular issues of cotemporary medical journals, with such comments as are consistent with the requisite brevity. As we by no means see all of the journal issues, and would not have time to read them attentively even if we did, it will not be expected that our summary will embrace the prevailing idea of all, or even a majority of important papers that are issuing constantly from the medical periodical press. We shall, however, attempt to give a truthful mirror of such practical progress in the healing art as falls under our observation.

Inversion of the Uterus reduced on the Sixteenth Day .- In the July number of the Lancet and Observer, George Mendenhall, M.D., Professor of Obstetrics and Diseases of Women and Children in the Medical College of Ohio, reports a case of inversion of the uterus, successfully reduced on the sixteenth day after the accident. Dr. Mendenhall says: "The right hand was introduced, without very great difficulty, into the vagina, the body of the uterus grasped and carried upward in a line corresponding with the axis of the pelvis, and steady pressure made in that direction, so as to put the vagina and uterovaginal connection on the stretch. The left hand was placed on the abdomen, and the fingers against the outer edges of that portion of the uterus looking towards the cavity of the abdomen, (which could be distinguished plainly,) and counter-pressure was made, for the double purpose of preventing injury to the utero-vaginal connections, and also for the purpose of facilitating the turning of the os and neck of theuterus over the body and fundus."

"The turn of the uterus commenced at the neck, and was continued along the body, until it involved the fundus."

The result of the last year's practice has been one of encouragement and hope for those unfortunate females afflicted with uterine inversion. Dr. White, of Buffalo, has successfully accomplished reduction after six months. (See American Journal of Medical Sciences for July, 1858.) Dr. Potter, of Geneva, N. Y., has reduced two cases, one of fifteen months' duration. (See Chicago Medical Journal for June, 1859.) Dr. W. Tyler Smith, of London, has successfully accomplished reduction after nearly twelve years. (See Transactions of the Royal Medico-Chirurgical Society of London, for 1858.) Hereafter, it is to be hoped that no woman will be abandoned to her fate, of however long standing may be the inversion.

Ununited Fracture treated with Silver Ligatures.—Professor E. S. Cooper, M.D., of San Francisco, reports, in the July number of the Lancet and Observer, a case of ununited fracture of the upper third of the femur, of two years' standing, successfully treated with silver ligatures. An incision, six inches in length, was made, and the soft parts dissected away, so as to freely expose the seat of fracture. The broken surfaces were placed in adaptation, and three sutures applied. A roll of lint four inches long was laid in the wound, to keep it fully open; after which, a roller was applied and a splint put on. The flesh wound was kept from healing for three months, when it was ascertained that bony union had taken place, when the wires were removed and the soft parts permitted to heal.

This operation seems to us much more severe, painful, and, under some circumstances, hazardous, than the sub-cutaneous puncture, proposed and so successfully practiced by Prof. Brainard, of Chicago. We should not have called attention to Prof. Cooper's case, were it not for quoting a practical remark in regard to keeping wounds open in similar cases. In the operation of resection, he says: "And I venture the assertion that there will be one case in every five where the wound is closed with the view of attempting to obtain healing by first intention, after resection, in which trouble will arise in consequence of burrowing of matter, and it is well known that patients not unfrequently die from this cause; whereas, in the method above recommended, it will hardly ever occur, and at no time does the patient suffer any inconvenience from the wound being open; and further, there are frequently small pieces of bone thrown off during the convalescence of these patients, and which, if discharged early, will cause little inconvenience, but which, if pent up in the limb, and compelled to remain a source of irritation, may perpetuate the disease for an indefinite length of time. Many limbs are sacrificed in this way which might be saved by keeping the bones in view until they become completely covered with healthy granulation, which indicates that no further danger of exfoliation is to be apprehended."

While we deprecate the burrowing of matter under muscles, we confess to not exactly liking Prof. Cooper's advice. Exposing bones to view for several months, thus subjecting them to the action of the air and unhealthy discharges, would seem to us rather to favor exfoliation than otherwise, saying nothing of the pain and annoyance to the patient.

Cephalic Version.—In the same number of the journal above referred to, Dr. Bonner, of Cincinnati, reports a successful case of cephalic version, and somewhat warmly advocates its general adoption in cases of

shoulder presentation. We notice Dr. Bonner's paper here for the purpose of remarking upon the following quotation: "I believe all authors not only oppose, but condemn, an attempt at cephalic version in shoulder and back presentations." This statement is not altogether true. Velpeau advocates it under certain circumstances, which circumstances are well pointed out. Leroy and Jöerg prefer it to podalic version; Ramsbotham, Dubois, and Smellie prefer it to turning by the feet, in a few specified cases. Prof. M. B. Wright, of Cincinnati, advocates it in a prize essay, published in the Transactions of the Ohio State Medical Society. Dr. H. G. Carey, of Dayton, Ohio, has an able article upon the subject in the American Medical Monthly, for 1856, page 87; and Dr. J. H. Brower, of Lawrenceburgh, Ind., has another in the Chicago Medical Journal, page 11, for the present year. In these two last-mentioned essays, the literature of the subject is somewhat fully examined.

Reduction of Hip and Shoulder Dislocations.—In the Peninsular and Independent for July, Prof. Moses Gunn, M.D., of Detroit, publishes a paper, illustrative of his views in regard to luxations and reductions of hip and shoulder joints. It is doubtless known to our readers that Prof. Gunn claims to have taught the manner of reduction known as Reid's method more than a year anterior to the publication of Dr. Reid's paper in the Transactions of the Medical Society of the State of New York. This point, however, he does not urge in this paper, but industriously labors to establish more important and practical facts.

Dr. Gunn is of the opinion that muscular contraction is not the opposing force that resists reduction, and upon this point he differs from Dr. Reid and most other surgeons. He, however, reports several carefully-arranged experiments, for which we must refer the reader to the paper itself, which seem to establish the correctness of his opinion. He says, "The principle I would seek to establish is this: that, in luxations of the hip and shoulder, the untorn portion of the capsular ligament, by binding down the head of the dislocated bone, prevents its ready return over the edge of the cavity to its place in the socket; and that this return can be easily effected by putting the limb in such a position as will effectually approximate the two points of attachment of that portion of the ligament which remains untorn."

We have not space for even a synopsis of Dr. Gunn's experiments, the practical results being sufficient for our purpose. He establishes the following general rule: "In all dislocations, place the limb in just the position which characterized it at the moment of escape, and reduction

will be easily effected." He subjoins the following special rules: "In the luxation upon the dorsum illi, the patient lying on his back, carry the limb across its fellow at a point corresponding with the union of the middle with the upper third, rotate inward, and, the pelvis being fixed by an assistant, the head may now be readily drawn into its place.

"In the dislocation into the obturator foramen, when extension is being made in the usual way at the upper part of the thigh, the limb should be abducted instead of adducted, as universally directed; abduction conforms to the general rule laid down above, and relaxes the upper portion of the ligament.

"In the forward dislocation upon the pubis, while extension and counter-extension are being made in the usual manner, the limb should be rotated externally; this relaxes the posterior and untorn portion of the ligament.

"In the backward luxation into the sciatic notch, the limb should be carried across the opposite groin, and rotated internally, previous to an extension being made.

"In the luxation of the humeral head into the axilla, the arm should be drawn upward by the side of the head, as directed in my first article.

"In the forward dislocation upon the thorax, the arm should be rotated externally before extension is attempted.

"In the luxation backward upon the dorsum scapulæ, the arm should be rotated internally before extension is commenced."

Death in Utero.—In the same number of the Peninsular and Independent, Dr. A. O. Potter, of Mantorville, Minn., reports a case of death of a fœtus in utero, by ligation of the neck by the umbilical cord, which was four times wound around it. The singular feature of the case was, that the head was far advanced in the putrefactive process, while the body and limbs presented a healthy appearance.

Limbs have sometimes been amputated in utero in this manner, and, in this case, had delivery been delayed, the head would have doubtless been amputated, while the vitality and integrity of the remainder of the body would have been maintained by the unobstructed circulation through those parts.

Criminal Abortion.—In the July number of the North American Medico-Chirurgical Review, Dr. Horatio R. Storer, of Boston, has an able article upon criminal abortions, which is continued from the three preceding numbers of the Review, and still to be continued. We cannot, in this brief summary, give a synopsis of these articles

and we do not care to make the attempt, as we take pleasure in advising all our readers to read the articles entire.

That criminal abortions are becoming painfully frequent, no one will deny who has had his attention for a moment directed to the subject. That the destruction of the fœtus in utero, at whatever time after conception, is always a crime, unless it becomes a necessity to save the mother's life, or to avert the hazards of a Cæsarean section, it is strange that any one should deny. To deliberately destroy the child in the womb, without a warrantable cause, is in all cases murder, and he who lends himself to the work places himself on a par with Herod, who ordered the murderous sacrifice of defenceless children.

It is perhaps not too much to say that in our large cities probably full one-fourth of the conceptions result in abortions! What a great sacrifice of life is there here! If we have overstated the fact, we should be glad to be convinced of it. It is by no means flattering to our vanity, to the boasted superiority of our Protestant religion, and the moralizing influences of our civilization, to know that the Catholics are far in advance of us in this particular. They hold the products of conception sacred.

We are happy to say that in the country criminal abortions are comparatively infrequent; yet every observing physician knows that even here they are by no means rare. We have many a time been importuned to destroy the products of conception, in the early stages of embryonic life, not only by the unfortunate unmarried, but by intelligent, respectable, and, otherwise, moral, married females. And we are sorry to say, though in all cases refusing, we do not now remember of a single case, in which we have been thus consulted, where abortion has not been secured through some means. We introduce this fact simply to illustrate the facilities of procuring abortion, when one is determined upon it. Only two weeks since we were consulted by a married lady, aged thirty-eight, who has two children, aged respectively fourteen and seventeen, with the intent of having abortion induced. She is an enthusiastic and exemplary member of the Church, and yet professes to see no wrong in taking the life of her own offspring, if it be only done before it breathes! This woman was four and a half months advanced, and motions were brisk; yet, through false feelings of shame, she seeks the destruction of her own child! We labored for hours trying to convince this lady of the heinousness of the crime, and with what result may be judged from the fact that we have just returned from attending her successful

abortive efforts. Through what means her ends were accomplished we did not inquire. The present week we have been consulted by a married lady, aged twenty-five years, who has two children, the youngest only six months old, for the purpose of having abortion produced. She supposes she is two months advanced. She says she is willing to have children once in two or three years, but once in twelve months she is unwilling to submit to. We shall soon expect to learn that her purpose has been accomplished. We once knew a mother of three intelligent and beautiful children, who said that she had conceived and procured abortion as often as once in four months, for sixteen years! When such practices are of daily occurrence, by an intelligent and Christian people, it is certainly high time that some one should raise a voice of protestation, and that that voice should be echoed by every intelligent physician in the land.

We had marked several passages for quotation in the paper in the July number of the *Review*, but we will do a better work in referring to the paper itself, or rather to the series of papers.

The True Cause of Long and Short Sightedness.—In the July number of the N. A. Medico-Chirurgical Review, Prof. C. W. Wright, M.D., of Kentucky, publishes an article upon the above subject, in which he differs from many other authorities in regard to the true cause of long and short sightedness. Thus he says, "In regard to myopia, there is no proof that the refracting power of the lens, or other humors of the eye, is increased, and in the great majority of cases the cornea is not more convex in near-sighted persons than in those not so affected; on the contrary, the reverse frequently appears to be the case." Prof. Wright gives his opinion thus: "Now the essential cause of short-sightedness is to be sought for in the iris, which in all cases is preternaturally contracted, or possesses an unusual degree of irritability." "The true cause of long-sightedness consists in a preternatural dilatation of the pupil of the eye, or, what amounts to the same thing, a loss of irritability of the circular fibres of the iris." The author's experiments seem to confirm the correctness of his conclusions.

Treatment of Synovitis.—In the Medical and Surgical Reporter, for June 25th, J. R. McClurg, M.D., has an article upon the above subject. He says, "The constitutional treatment recommended by authors is probably quite appropriate; but the local, such as leeching, cupping, blistering, pustulation, with tartar-emetic ointment, caustic potash, the moxa, the actual cautery, and cutaneous incisions, against each

and every one of them I do protest, and denounce them in the majority of cases, as worse than useless."

As Dr. McClurg's constitutional treatment possesses no peculiarities worthy of remark, we give only his topical. "If it be the knee which is the seat of disease, I apply a roller most carefully upon the limb. from the toes to the groin, as tightly as the condition of the disease will permit, and then use ice, vinegar, and salt, evaporating lotions, or flannels wrung out of hot water, to the knee, if the case be one of acute synovitis. If it be a case of chronic synovitis, I invariably cover the joint with a plaster of the ceratum hydrargyri compositum, and over this a tight roller, as above. If suppuration has already taken place, the pus must be let out by a free incision, and not by a small puncture, previous to the application of the roller. In the acute stage, after the roller is applied, the limb must be supported on pillows; but in the chronic stage a carved splint is decidedly preferable." We confess to a liking for Dr. McClurg's local treatment. We have seen suppuration so often occur, where cupping, blisters, and croton oil had been long and perseveringly used, that we have almost come to regard each case of synovitis as having its specific and unalterable tendency to suppuration or resolution stamped upon it at the outset. Our local treatment, for a time, has been perfect immobility, with warm or cold poultices, whichever might be most agreeable, of elm or flaxseed.

Tetanus.—In the New York Review and Buffalo Medical Journal, for July, Dr. Ranking, of Buffalo, reports a case of tetanus, of much severity, occurring, as a primary effect, after a blow from the kick of a horse, that terminated favorably in a few days. The treatment was tartarized antimony, sulphate of morphia, of each two grains, and water four tea-spoonfuls; one tea-spoonful of this prescription was ordered every half hour. Three pints of blood were drawn. Subsequently a blister was drawn on the back of the neck and down the spinal column.

Croup.—In the same number of the journal just referred to, Prof. Theophilus Mack, M.D., of Buffalo, quoting from Paris journals, says, that "M. Bouchut reports three cases of croup cured by large and repeated doses of tartar-emetic. To a girl aged three years he gave ten grains, in doses of two and a half grains every half hour, in syrup of poppies. The cauterization of the larynx he recommends to be practiced at the same time, and the emetic given every half hour, so that the child may throw up much, and not be too severely purged."

This is not a new treatment, and even M. Bouchut's doses have been exceeded, if we rightly remember; and we are also of the opinion that it

is not the best treatment for this formidable disease. Certain are we that in Paris the children, or the antimony, are composed of different materials from the same articles in this locality, if children of three years can take two and a half grains of antimony every half hour, for two pr three days together, and not die of the medicine, if not of the disease.

In the same communication, Dr. Mack says that Prof. Michel has cured a case of facial neuralgia, by a section of the infra-orbital, inferior dental, buccal, and lingual nerves. This is neurotomy with a vengeance!

Operations for Absence or Obliteration of the Vagina.—In the July number of the Chicago Medical Journal, Prof. Daniel Brainard, M.D., of Chicago, has an able article upon the above subject, illustrated with a case. Prof. Brainard lays down the following rule: "That absence or obliteration of the vagina in unmarried women, where the menstrual flux does not take place into the uterus, does not require or justify any attempt at operation. It should, whenever its existence is ascertained, be considered an insuperable bar to the contracting matrimonial relations." But where the menstrual flow takes place and is restrained, thus endangering the general health, or where the married relation has been assumed and the patient desires an operation, the case assumes a different aspect.

Two or three weeks since we were consulted by an unmarried lady, aged 18 years, who had never menstruated. We learned that she had, at different times for the last three years, been under treatment for amenorrhoea. As the patient was well grown and the breasts well developed, we suggested that the difficulty might be mechanical. On examination, the vagina terminated in a cul-de-sac, less than an inch within the os externum. No evidences of retained menses were discoverable. We advised no treatment, and single blessedness. Should she marry, which we think is contemplated, we shall probably operate and report results.

## REVIEWS AND BIBLIOGRAPHY.

A Practical Treatise on the Diseases of Children. By D. Francis Condie, M.D., &c, &c. Fifth Edition, revised and enlarged. Philadelphia: Blanchard & Lea. 1858. Pp. 762.

The earlier editions of this work have made it quite familiar to the profession, and a simple announcement of this might seem to be all that is necessary. The call for repeated editions of the work serves to show, if those editions have been large, that it is ranked as an authority, and much sought for by the younger members of the rofession,p in making their selections of books for a library.

Dr. Condie is evidently no idler. The books which he edits, the articles he writes, the reviews and selections which bear his initials in the medical journals of Philadelphia, prove that his pen is a busy one, and has no leisure to rust out. Neither is he an undecided man. He sets things down and sets things up with an air which convinces you that he is strongly of opinion that he knows what is what, and that those who differ from him are to be pitied, they are so palpably wrong. His whole physique, and his whole writings, show him to be a man who would like and dislike with a will; who would rely upon his opinion in face of all the world; who rarely could be convinced of any error into which he might have fallen. In fact, when one sees him, hears him speak, or reads his writing, one is reminded of the proverb concerning Scotchmen, viz.: that "it becomes them to be right; for if they are wrong, they are eternally wrong."

This treatise on the diseases of children is fully illustrative of the peculiarities of its author; and these, so far from being mollified in the successive editions, grow more marked and prominent. To our own mind it is very clear that Dr. C. set out by being wrong on many points which concern the treatment of disease in children; and, however much we may regret it, we are not surprised that he has not yet got right. In fact, we do not expect him to do better. But this treatise has long seemed to us a very unsafe guide for young practitioners, and we therefore take the present occasion for setting forth some of the reasons for our opinion. We do not suppose, for a moment, that what we may say will change the opinions of the writer, but we do hope to be able to save some one from blindly following his lead.

The defect which strikes one at first is the excess of the author's conservatism, to give it a gentle name; or, to speak more definitely, the persistence with which he clings to his early notions. Somewhere he speaks of his forty years' practice, which certainly entitles him to be heard on those topics in which he has continued to be a learner. But it by no means follows that a man has continued to advance in medical knowledge and skill because he has written prescriptions or doled out medicines for forty years. This persistence is the more remarkable because Dr. C. has been quite constantly occupied during a large portion of this time in editorial duties, either of compilation or

review, which have compelled him to be more or less familiar with the current periodical professional literature. He has, however, been rather a reader of it, than a student of it; and hence, although we find in this book that English, French, German, and even American journals are referred to on different points, and in different diseases. still they have little effect upon his opinion, and tend but little to modify his treatment. We are sure that Dr. Condie will acknowledge the correctness of our statement, though we are not so certain that he will see it to be a defect. In fact, he says in his preface, that in the preparation of the treatise, he has "relied chiefly upon his own observation and experience;" and that "he has made use of the labors and adopted the opinions of others, only when he has found them to correspond with, or to be confirmatory of, the results of his own observations and inquiries." And herein is described the precise peculiarity which, to our thinking, is the cause of this grievous defect. No man who uses the labors of others only when they confirm the results of his own observations and inquiries, is much benefited by what he reads of the doings of others. In fact, so long as he brings everything to the Procrustean bed of his own experience, making it square with this, limited though it must be, he ceases to be a leader in the progress of medical science, and his writings cannot be an exponent of anything more than his own ideas. The true student, the man who does not cease to be a learner, ever brings his own experience to the test of trial with others, not pronouncing this or that to be untrue because it has not been his practice, but constantly re--ceiving the statements of others as of authority, justifying a candid comparison with his own experience, and at the fitting time demanding impartial trial. Not that he should run after every will-o'-thewisp; for this defect is as grave as the one to which we are objecting, though it certainly cannot be greater.

The evils of such a habit of mind, great as they are in a practitioner, become tenfold more important and more to be regretted in one who sets himself up to be a teacher. In the latter case, the prejudice, which does harm enough in the practice of the individual, is sown in the mind of every pupil, and sometimes is with difficulty uprooted.

But another, and, if possible, greater fault, is in the excessive use which Dr. C. advises of those heroic remedies, blistering, bleeding, and the administration of calomel. We do not hesitate to say that each of these methods of treatment must occasionally be resorted to in dealing with the diseases of children; but we know that they are not re-

quired so often as they are advised by this author. Blistering, even when the surface vesicated is not very extensive, is a grave matter for a child; and we have seen children, who had recovered from the disease under which they labored, die of the blistering which was not needed to cure them. And yet this was in the hands of practitioners who used them with much less freedom than Dr. Condie would advise them. Every one recognizes the danger to the life of a child when a small and superficial burn on the chest is received; an unfavorable prognosis being too frequently the correct one. And yet blisters, acting in the same way precisely, are praised by Dr. Condie, as "remedies from which much advantage will be derived in most of the cases of pneumonia occurring in children." So, too, in treating of bronchitis, he says: "After bleeding, either general or local, has been carried as far as is thought advisable, there is, perhaps, no remedy from which more decided relief will be derived, than a blister applied to the upper part of the chest, or between the shoulders." It is true that in both these cases he directs its removal as soon as the skin-is uniformly red, when an emollient cataplasm is to replace it. But, if this is not sufficient in such young subjects to lead to vesication, it is incurring a fearful risk of it, when the same redness could have been produced by other means, without that danger. Throughout the volume we find blisters recommended to be applied to the head, to the chest, to the abdomen, without, as far as we can observe, a single caution as to their use, and certainly in a way that would justify a tyro in believing them to be useful in almost every severe disease, and in resorting to them on almost every occasion. It is to be borne in mind that this work will be chiefly consulted by tyros.

So it is with bleeding. It is freely recommended, as if it were not a very serious matter to a young child to be leeched, or to have a vein opened. We have had the curiosity to examine the book very minutely on this point, and have taken the trouble to copy the words used by the author in recommending the abstraction of blood in the class of diseases which best excuse it, namely, the inflammations. The reader will be as much surprised as we were.

Inflammation of the Brain.—"Bleeding should be resorted to upon the very onset of the disease, and carried, within as short a time as possible, to an extent commensurate with the violence of the symptoms and the age and vigor of the patient. If the child is old enough, a vein should be opened in the arm, while the patient is in an erect or sitting posture, and the blood drawn in a full stream, until paleness of the face, or other symptoms of approaching syncope, are induced; and should the symptoms of reaction, with active determina-

tion to the brain, again return, the bleeding should be repeated without delay, and carried to the same extent. When we are unable, in consequence of the age of the patient, to procure blood from the veins of the arm, we may open one of the jugular veins, or apply a sufficient number of leeches to the hands or feet, and promote the flow of blood from their bites by immersion of the parts in warm water."—P. 426.

Inflammation of the Breasts.—"When, from any cause, considerable inflammation, pain, and swelling of the breasts take place, the case should be treated by a few leeches, and the application of soft emollient poultices."—P. 701.

Inflammation of the Bronchi.—"Whenever bronchial inflammation is attended with symptoms of any degree of severity, more especially when it occurs in robust, plethoric infants, blood-letting by cups or leeches is the remedy upon which alone our chief reliance should be placed. It should be resorted to as soon after the inflammation is developed as possible."—P. 292.

Dysentery.—"Leeches should be applied along the course of the colon, in numbers proportioned to the violence of the disease and the strength and age of the patient, and repeated, if, after their first application, the symptoms remain without considerable abatement."—P 260

Diphtheritis and Gangrene of the Throat.—"In robust children, particularly in those of a sanguineous temperament and plethoric habit, in whom the swelling and inflammation of the throat are considerable, and attended with symptoms of intense febrile excitement, general as well as local bleeding should be resorted to. Even when general bleeding may not be considered admissible, leeches to the throat, behind the ears, or to the angles of the jaws, will, in many cases, be found advantageous."—P. 178.

Scrofulous Inflammation of the Ear.—"In cases attended with symptoms of a good deal of severity, leeches, a mild, unirritating diet, and the use of the tartarized antimony, with nitre and calomel, or with the sulphate of magnesia, in solution, as directed in scrofulous ophthalmia, will be proper."—P. 641.

Scrofulous Ophthalmia.—"If the affection of the eye is recent and acute, the application of a few leeches to the temples, and to the external angles of the eye, will often be advantageous."—P. 637.

Inflammation of the Gums.—" If the inflammation is not promptly reduced by these means, (mild emollient and astringent washes,) a few leeches should be applied to the angles of the jaw, or to the gums themselves."—P. 151.

Enteritis.—"In most cases, leeching will be proper. The leeches should be applied over the surface of the abdomen, and graduated in number, according to the intensity of the local symptoms. Some degree of judgment, however, will be demanded in the employment of leeches in inflammation of the intestines, especially in children. Few cases occur in which a moderate application of them will not be proper and beneficial; and whenever the pain, heat, and tension of the abdomen are considerable, they should be more freely employed, and may

be repeated, if the first application fails to produce a decided abatement of the symptoms just enumerated."—Pp. 256-7.

Pneumonia.—" The employment of blood-letting, particularly by cups or leeches, will very generally be found beneficial."—P. 308.

Erythematic Stomatitis.—" When marked by a greater degree of severity, it may be necessary to apply a leech or two at the angle of the jaws."—P. 138.

Coryza.—"In more violent cases, the application of a few leeches to the root of the nose will be advisable, with some gentle diaphoretic."—P. 284.

Inflammation of the Navel.—"In some instances, we have seen the inflammation, in cases of ulceration of the navel, so extensive as to require the application of a few leeches."—P. 700.

Angina Externa—Phlegmone Parotidea.—"In cases of simple phlegmonous inflammation, the treatment consists in the application of leeches to the neck, in numbers proportioned to the extent of the inflammation; and their repetition, after a short interval, if the local symptoms are not sufficiently reduced by the first application."—P. 185.

But we cannot allow more space for these quotations; though we may add, that those we have given are not selected, but are as they come in the index under the head of Inflammations. The remainder are quite equal to them.

No one of experience and observation in the treatment of children can fail to be astonished at such free use of this heroic remedy; and it seems to us incredible that the author himself should resort to letting blood with such readiness.

But it is in advising the use of calomel that the author outdoes himself. Here quotation is impracticable, as will be realized when we state the results of a careful examination to which our curiosity led us. Of the whole number of diseases treated of by the author, excluding mechanical injuries and such affections as follicular warts, asphyxia, polypus of the rectum, &c., we find that the whole number is sixty-eight. The use of calomel is advised in fifty-one, leaving only seventeen to go destitute of this remedy. This use of calomel is carried to such an excess, that it is recommended in cancrum oris; though, we are thankful we can add, the author had grace enough to say that "it is to be employed with the utmost caution."

It is a great pity to have so excellent a remedy so grievously abused, but it is such books as this and such practice as this that give occasion to the whole army of irregulars to lay just blame upon the faculty, and thus to obtain the too stable foundation for all their edifices.

It is proper to repeat, that the objection to Dr. Condie's recommendation of this heroic practice, great as it would be otherwise, is increased tenfold by the fact that the book is intended for the use of tyros. Where this is a young practitioner's only book upon these diseases, as must often be the case, we cannot conceive it possible that many lives should not be needlessly sacrificed by him; and only years of study would rid him of the habit of drawing his lancet, or spreading his plaster, or parceling out his calomel to the greater part of his infantile patients. We pity the helpless sufferers, but feel justified in laying more blame on the author than on his pupil.

To our thinking, there are, besides these errors of commission, abundant errors of omission, due to that obstinate neglect of all knowledge which is not exactly in accordance with his own experience, which the author so ingenuously confesses to be his custom. It is not our purpose here to enumerate them, having already transgressed our intended limits. But we have said enough, we apprehend, to justify us abundantly in declining to commend this book. There are many other better guides in the treatment of children; there are few more unsafe.

A Practical Treatise on Enteric Fever; its Diagnosis and Treatment: being an analysis of one hundred and thirty consecutive cases, derived from private practice, and embracing a practical history of the disease in Virginia. By James E. Reeves, M.D., of Virginia. J. B. Lippincott & Co., Philadelphia.

The medical profession is mostly indebted to college professors and city practitioners for its text-books and its literature. The former too often know little of practice, and the latter see disease only as modified by city influences. Diseases, in their symptoms and requirements for treatment, are not always the same in city and country. There are many country practitioners, whose field of observation is extended, and whose labors run through many long years, that might deliver over to the joint stock of the profession a rich harvest of practical facts, would they but take the trouble to do so. There are many, going quietly to their daily conflict with disease, month after month, and year after year, who wield their weapons of warfare with a judgment, tact, nice discrimination, and practical skill, worthy of all praise; the community around them receives almost unconsciously the benefits of their labors, while the literature of their noble profession would die of inanition for aught that they contribute to its sustenance.

Dr. Reeves is a country practitioner, yet he has ventured to take notes and to print them. The result is a little book on enteric or

typhoid fever. A part of the material in the volume before us was written for and published in the Buffalo Medical Journal, for 1856.

Dr. Reeves' work does not profess to be complete in all that pertains to enteric fever, but is a concise statement of the author's opinions upon subjects of practical interest, based upon his experience; it is, hence, not amenable to those rigid rules of criticism that might otherwise be applied to it. We shall simply give an analysis of its contents, interspersed with such remarks, suggestive and critical, as may seem appropriate.

The first chapter is devoted to preliminary matters, and the author, in our opinion, settles the question of non-analogy of typhus and typhoid fevers in quite too few words. Of the latter, he says, "It is certainly, I think, no more like typhus than roseola is like scarlatina." Granting that this is now the fashionable opinion; yet, because such close and thorough observers as Drake thought differently, the subject was worthy of more extended discussion. For convenience, Dr. Reeves divides enteric fever into mild, intermediate, and malignant. This arrangement is certainly simple, and may apply to nearly all diseases of any gravity.

Chapters 2d and 3d are devoted to symptomatology, and these are decidedly the best chapters of the work. Dr. Reeves is evidently a good observer, and the symptoms are concisely, and yet graphically, stated. Of his one hundred and thirty cases, the access was sudden in forty; in the remaining ninety the period of access varied from two to eight days. The rose colored eruption, Dr. Reeves says, he has seldom failed to observe, even in the mildest forms of the disease; while the transparent vesicular eruption, called sudamina, has very seldom occurred, except in the graver forms of the disease.

Chapter 4th is devoted to anatomical lesions, and is copied entire from Wood's Practice of Medicine.

Chapter 5th is devoted to the history and causes of the disease, and, though perhaps the longest chapter in the work, is really the most defective. Here was a wide field open for investigation. Of the history of the disease we care less, but the atmospheric causatives and terrene dependencies of enteric fever should have been more fully brought out. As the present writer expects soon to publish the results of his investigations upon this subject, it will be waived for the present.

Chapter 6th is devoted to the duration and complications of the disease. The opinions of several are quoted upon the first point, going to show that the average duration of enteric fever is about 21 days,

Of Dr. Reeves' mild cases the average duration was about 15 days, and of the other two forms about 30 days.

Chapter 7th is devoted to terminations and sequelæ, which subjects are handled with very great brevity, and quite unsatisfactorily.

Chapter 8th is devoted to diagnosis, mortality, prognosis, and nature. This chapter is very satisfactory; an analysis of which, however, we have not space to give. Suffice to say, that the author is a believer in a specific poison, and in the contagious nature of the disease.

Chapter 9th, which embraces about sixty pages, and is really the most important part of the work, is devoted to treatment, and will demand a passing notice. It was doubtless to express the author's views upon this point mainly that the work was written, and we have no doubt that, in the main, those views are correct, though in some minor details we might be disposed to differ from his expressed opinions.

Dr. Reeves very justly places a high estimate upon emetics, especially when brought to bear very early in the attack. In view of the general disturbed condition of the stomach and the prospective lesions of the bowels, it is apparent that the means to this end should be as mild as is consistent with thorough emesis.

Of cathartics, the author has a much higher opinion than we. He thinks, in all cases, a cathartic should be administered early; calomel with jalap or rhubarb is preferred. It is his opinion that the bowels should be kept loose to the end of the disease; thus he says, "It is always best that the bowels should be suffered to remain moderately loose. Two or three discharges a day, I think, are of service; and if these do not take place naturally, some mild laxative should be administered." Against such interference we enter our decided protest. Quite early a cathartic is appropriate, if the bowels are not already loose; but nothing harsher than blue pill, aided if need be with castor oil, should be administered. After that, one movement a day is amply sufficient, and we had much rather they would move only once in two days, than that they should move three times in one.

Dr. Reeves is an earnest advocate of the use of the recatrum viride, and gives it in such doses as will keep the pulse below 80 per minute. Of this treatment we cannot speak experimentally, as we have never used the veratrum viride in enteric fever. Our objections to it have been based upon theoretical grounds. Until a change comes over our experience, we are content to dispense with it, having lost but one case of enteric fever in eleven years of practice. It is but just, however, to observe that our cases have been mostly sporadic. In

the one case referred to, death resulted from cerebro-spinal meningitis.

Dr. Reeves seconds the opinions of Prof. Wood, in regard to the utility of oil of turpentine, in certain conditions and appropriate cases. He, however, believes that opium is equally efficacious, where not counter-indicated, and should be combined or administered conjointly with the oil. Where the brain and its membranes are unaccompanied with congestion, we can bear testimony to the utility of the opium as a nervous stimulant and general sedative; and, all in all, we believe it second to no other agent in enteric fever.

Of the chlorate of potash Dr. Reeves speaks highly, and probably justly. Of tonics and stimulants he has less confidence than ourselves. He seldom resorts to quinine earlier than the end of the second week. In this region, as we have observed the disease, we are confident benefit will accrue from its earlier use, especially when combined with opium, and perhaps ipecacuanha. As an antispasmodic, Dr. Reeves trusts mainly to valerian and camphor. To this end we are in the habit of using asafætida, opium, and camphor, in combination, while Hoffman's anodyne is usually given in connection with such other remedies as the necessities of the case require.

There is one agent that Dr. Reeves has not alluded to, which, because of its peculiar adaptation to certain conditions frequently present in enteric fever, should not be passed over in silence. When there is subsultus tendinum, low, muttering delirium, and the evacuations are involuntarily discharged, all showing a complete prostration of the nervous system, there is probably no combination of medicines equal to strychnine, which may be beneficially combined with small doses of opium. Warm turpentine applied the whole length of the spine is a powerful auxiliary.

Chapter 10th is devoted to the management of convalescence, and a requires no special notice.

Having now given a brief synopsis of the work before us, we conclude by saying that, though lacking some of the requisites of a complete treatise on enteric fever, it is a very readable and instructive work. We consider that Dr. Reeves has erred in making no allusion to Dr. Drake, who has written one of the best essays on typhoid fever ever written by an American, and whose researches cover Dr. Reeves' field of labor. We have no doubt, however, that the physicians of Virginia, to whom the book is dedicated, as well as those of neighboring States, will appreciate the author's labors, and derive instruction from its perusal. If it accomplish no other purpose than to

encourage other country practitioners to make systematic records of their observations and experiences, and, where of sufficient interest, induce them to publish such records, it will not be without its beneficial results.

To say that it is published by Lippincott & Co., is to say that paper, type, and binding are everything that a book of the kind should be.

o. c. g.

A Treatise on Gonorrhaa and Syphilis. By SILAS DURKEE, M.D., Member of the Massachusetts Medical Society, &c., &c. With eight colored plates. John P. Jewett & Co., Boston. 1859. Pp. 442.

This work is based upon an essay which gained the Boylston prize of Harvard University. In extending it to its present proportions, the subject has been much elaborated, and many important additions made.

The design of the author seems to be to avoid as much as possible vexed questions of a theoretical nature, and not to follow blindly any authority, however eminent, but, by the aid of his long experience, to elaborate from every source what is necessary to make up a practical treatise for the instruction of students, and the daily use of the general practitioner.

A work of this description, it seems to us, is very much needed, the diseases of which it treats having become widely diffused through the country, and coming within the circle of almost every physician's practice. It is true that our medical literature is quite full upon these subjects; in fact, so much has been written, and so many contradictory views advocated, that a practical and uncontroversial work has become a great desideratum. Hunter, Ricord, Vidal, and a host of others, have written with much ability and at great length, and we are certainly indebted to them for our present correct idea of the theory and pathology of these diseases; but each of these eminent men has his own peculiar ideas and opinions, more or less at variance with all others, and we believe most physicians will agree with us in saying, that after consulting any or all of these writers, with a view to any particular case, a man may go away more puzzled than ever, both as to his diagnosis and treatment. In fact, the great men in this specialty have fired over the heads of the profession at large. Our author seems to have had this fact in view, for he remarks in his preface:

"The paramount design which I have endeavored to keep in view

has been to furnish a book which shall be practically useful. I have studiously avoided engaging, to any great extent, in any doubtful matters."

We have given this work a careful perusal, and feel confident in the assertion that the medical profession of the country will agree with us in the opinion that the author has successfully carried out his design. The style is quaint and familiar, without being diffuse; easy, pleasant, and almost conversational.

The reported cases are judiciously chosen and well related, and many of the peculiar and incidental perplexities which arise in the course of practice in these diseases very properly alluded to. The treatment of the various forms of gonorrhea and syphilis, with their complications, is very fully discussed, and a great variety of formulæ given.

An experience of thirty years in the treatment of skin diseases, as a specialty, enables Dr. Durkee to speak with peculiar authority on the diagnosis and management of secondary and tertiary syphilis; and on this subject, upon which general practitioners are most often at fault, the work is particularly clear and elaborate.

On all the vexed questions he states his own convictions with great modesty, giving his reasons, and treating those who differ from him with the utmost courtesy and fairness.

The limits of a simple notice do not allow us to examine the chapters seriatim. We close with the remark, that the work is executed in very neat style, the plates clear and original, and we confidently recommend it to the profession as the best work, for a manual on these subjects, which has yet been published.

### EDITORIAL AND MISCELLANEOUS.

Letters from Professors J. Hughes Bennett, of Edinburgh, and Carl Rokitansky, of Vienna, on the Post-Mortem Examination of the late S. S. Whitney.

The following opinions relative to the pathological appearances found at the autopsy of the late Mr. Whitney are of great interest, in connection with the history of this remarkable case. Comment is unnecessary. The agreement of both of these celebrated pathologists, whose opinions are here given, upon all the essential points in the case, is conclusive. To both of them was forwarded a copy of the Febru-

ary number of the Monthly, containing a full report of the proceedings of the Academy of Medicine when this subject was under its consideration. In addition to this, a copy of the original post-mortem, certified by his Honor the Mayor of New York, was sent to Prof. Rokitansky, by his former pupil and personal friend, Dr. Charles Bernacki, of this city. Dr. Bernacki has kindly placed Prof. Rokitansky's reply at our disposal. The letters are placed in the order of time in which they were received. To the translation, here given, we append the German, that both may be seen by those who are familiar with the language in which the original is written.

#### PROF. BENNETT'S LETTER.

EDINBURGH, May 18, 1859.

My DEAR DOCTOR—I have hesitated for some time as to how I ought to reply to your letter; that is, whether it would be better to enter into a lengthy criticism of Mr. Whitney's case, or simply answer the two queries you have put me. After carefully studying the case itself, I find so much to comment on in the various branches of diagnosis, pathology, treatment and ethics, that I feel constrained to throw my notes aside, and give up the idea of entering into the matter fully, as it would oblige me to write a treatise rather than a letter.

You request my opinion: 1. As to the tubercular character of the pulmonary abscess; 2. As to whether such effect as Dr. Beales intimates could have been produced by the injection of nitrate of silver,

which was employed.

1st. As to the tubercular character of the pulmonary abscess.—The description given by Dr. Green of the physical signs on the 25th October, 1858, is remarkably clear, (see Am. Monthly, p. 104,) and can leave no doubt as to the existence of condensation of the left lung at the apex, with softening of the tissue. When Dr. Beales was called in, Dec. 14th, he does not seem to have made any physical examination of the chest. At all events, no account of any is given from that time up to the period of the patient's death, (MONTHLY, p. 111 to p. 115.) But he tells us afterwards, that he had previously made such examination (p. 117) towards the end of October; he gives no description of these signs, but only states his opinion, viz., that "he could not discover any tubercles in his lungs, and did not believe any existed." The report of the post-mortem, however, demonstrates that the physical examination of the lung made by Dr. Green was in every respect correct, (Monthly, p. 116.) "The whole of the upper part of this lobe (the left) was red, and solid-hepatized." "At the commencement of the bronchial ramifications there was an open cavity,

about the size of a small black walnut, of a reddish-brown color, and irregular villous surface, as though a slough had separated." This answers thoroughly for the flat sound, detected two months previously, over the upper portion of the left lung, and the humid râle audible below the left clavicle, on inspiration and expiration.

As to the nature of the disease, Dr. Beales conceives it to have been acute and recent pneumonia, (p. 118.) I cannot think so, when I consider the accurate account of physical signs given two months previously, then indicating the condensation and softening which were subsequently found. It must have been chrouic pneumonia passing into gangrene, or a limited tubercular abscess accompanied by chronic pneumonia of the apex. The descriptions given of the lesions do not enable me to say which of these it was. In fact, I consider it a matter of little importance, because a chronic exudation of the apex so readily passes into tubercle, and an old tubercular abscess is so commonly accompanied by chronic pneumonia, that, in truth, it often becomes difficult, if not impossible, to say where tubercle ends and pneumonia begins. It is enough that a chronic exudation was there, and that, I consider, Dr. Green fully indicated by his physical signs six or seven weeks before Dr. Beales was called in.

2d. As to whether the treatment caused the disease .- Dr. Beales informs us that Dr. Mott told the family, after the post-mortem examination, that they had not seen any disease that might not have been produced within a week, (Monthly, p. 118.) According to this idea, it could not have been the injection into the trachea which caused the pulmonary disease, as that operation was performed on the 6th of December, without causing any irritation, and he died on the 21st. Besides, the pulmonary lesion existed on the 25th October, as proved by physical signs. The injection, therefore, could not have caused that lesion. Is it not more probable that, a chronic exudation having existed at the apex, and a cavity formed, this latter perforated the pleura, causing the pleural exudation, followed by the emphysema of the cellular tissue? At what moment did this perforation take place? We are told that Mr. Whitney visited Dr. Green on the 14th of December, after breakfast, (the time is not stated;) the doctor passed an instrument into his throat, and finding some obstruction, he pushed the instrument with some force; he (Mr. W.) felt something give way, immediately experienced severe pain about the top of the windpipe, and told the doctor he had "hurt him;" he returned home, informed the family of what had occurred, and was seen by Dr. Beales at 1 P. M., (p. 112.) Dr. Green's account of what happened on the 14th is dif-

According to him, (MONTHLY, p. 106,) when the sponge reached the glottic opening, the patient partially closed the throat, so that the instrument did not enter the windpipe at all. It was at once removed, no more force having been used than that which is constantly employed every day in operations on the air-passages. The patient, after talking a while with Dr. Foy and myself, and remarking that "the operation hurt him more," or that "he felt it more than usual," he left, with the arrangement that he should return the next day and have the tube employed. The patient's account to Dr. Beales is, that at the moment the probang was arrested at the glottis, he felt something give way, and experienced severe pain about the top of the windpipe, (p. 112.) But is this consistent with the fact that he talked for a while with Drs. Foy and Green, and went home intending to come next day, &c.? Again, was the pain, if felt at the top of the windpipe, symptomatic of perforation of the pleura in the chest? It appears to me difficult to answer these questions, more especially when we read the account of the alarming condition of Mr. W. at 1 o'clock, when first seen by Dr. Beales, (MONTHLY, p. 111.) I am, therefore, inclined to ask. What occurred in the interval between the patient's leaving Dr. Green and his seeing Dr. Beales? This may have been an interval of three or four hours, and of this most important period I can find no account whatever. It is true, Mr. Whitney seems to have had the impression that his severe symptoms commenced when the sponge was arrested, but this is negatived by the evidence of Drs. Green and Foy, who saw no evidence of severe pain even in the throat. When, then, did the pulmonary and pleural perforation take place, which induced the emphysema and subsequent symptoms? With the facts at present before me, I cannot answer this question, but it is clear to my mind that it may have occurred during the hours not accounted for; that it might have been altogether spontaneous, connected only with the progress of the chronic pulmonary lesion; and that it had no relation whatever to the operation performed by Dr. Green.

In addition to the lesion already referred to, it appeared, on dissection, that there was an abscess behind the larynx, and stretching towards the left of the pharynx, the size of a hen's egg, with an opening at its upper and posterior part, into the pharynx, large enough to admit the end of the forefinger. This abscess was not discovered before death, by any of his attendants, medical or surgical. Dr. Mott, a great authority in surgery, asserts that this was an acute abscess. Dr. Beales distinctly states, (Monthly, p. 119,) that in his opinion it was caused on the 14th December, by the accidental lacer-

ation of the pharynx by the probang; and his account of the symptoms, as he observed them at 1 P. M. on that day, supports the supposition, especially the intense pain in the region of the larynx, shooting through to the cervical vertebræ, and down the course of the trachea to the chest; he kept grasping the larynx, &c. (p. 111.) Now, as the larynx was shown subsequently to be healthy, it is very probable that these symptoms were connected with the pharyngeal abscess. But how? Is such pain consistent with the first commencement of an abscess, or did it accompany the rupture of an abscess previously formed? By what signs was it pronounced to be acute? Might it not have existed before the operation of the 14th? Might it not have come on subsequently? On all these points I will not venture to speak. But having now used the probang in many hundred cases, and under all circumstances, I am at a loss to understand how its being arrested at the glottis would either lacerate the pharynx, so as to give rise to an abscess, or cause the bursting of an abscess which had already formed-"downward, behind and below the thyroid cartilage." I cannot but think that the application of the sponge had no more to do with this abscess, than it had with the exudation into the apex of the left lung.

Yours, very truly and sincerely,

J. HUGHES BENNETT.

PROF. ROKITANSKY'S LETTER.

MOST ESTEEMED FRIEND-

I received your letter on the 8th, along with the documents relating to the sickness and death of Mr. S. S. Whitney, through Mr. Wallner, or rather, as I was not at home, through my wife. First permit me to express my most heartfelt thanks to you, and my transatlantic friends, for the friendly remembrance which you show in the recognition of my scientific labors, and the honorable confidence reposed in me. And now to my task. I have devoted my entire attention to the documents you sent me, as you will perceive, absque omni partium studio.

Certainly the most important point is to determine the nature of the cavity in the left lung, "just at the root, or the commencement of the ramifications of the bronchiae." This is very difficult, for two reasons: 1. Because the description of the cavity is very imperfect; and 2. Because the whole report (Gesammtbefund) is very defective, inasmuch as a complete dissection was not made. Neither sufficient local nor sufficient general data are given for a diagnosis.

In the last point of view, particularly, we are not certain whether a tuberculous individual or not is under consideration. It would seem as though no actual tuberculization was present.

If, under these circumstances, I give my opinion in compliance with your request, it can be of value only as a supposition.

1. The abscess in the larynx might be the result of a perichondritis; this abscess broke externally into the contiguous circumjacent areolar tissue. The red point found in the larynx was probably connected with the abscess. The reddening of the mucous membrane of the air-passages is of no importance.

2. I do not consider it as proved that the condition of the upper lobe of the left lung was that of recent hepatization. True, there was noticed a considerable pleuritic exudation on the exterior of the lobe, but I presume that this lobe of the lung had been partially attacked with atelectasis, (obturation,) in consequence of a bronchial catarrh, and was in a state of incipient destruction, (induration.)

3. The cavity in this lung (this lobe of the lung) I would consider as a bronchial sac, or rather as a cavern, (bronchial cavern,) resulting from the ulcerous destruction of such a sac.

Was this ulcerative process due to a continuous, exacerbating, catarrhal inflammation of the mucous membrane of the sac, or to a tuberculization of the mucous membrane of the same? We are obliged to accept the former solution of the question, inasmuch as the report denies the presence of any tubercles.

This cavernous opening must then be considered, since from it a destruction of both layers of the pleura proceeded, as the source of the extravasation of the inspired atmospheric air into the circumjacent areolar tissues. This, then, is my opinion with reference to the significance of the results of the post-mortem examination. As regards the operative treatment, I have not been requested, in fact, to give an opinion; still, you may perhaps like to hear that also. It is very evident that the two conditions met with, i. e., the abscess in the larynx, and especially the cavity in the left lung, existed before the treatment; and I also believe that the latter (the treatment) was not the cause of the death of the patient.

Your sincere friend.

ROKITANSKY.

HOCHVEREHRTESTER LIEBER FREUND-

Ich habe am 8ten d. Ihren Brief samt den den Krankheits-und Todes-Fall des Hrn. S. S. Whitney betreffenden Documenten durch Herrn Wallner oder vielmehr, da ich nicht zu Hause war, in letzter Instanz durch meine Frau erhalten. Zuvörderst erlanben Sie, dass ich Ihnen und meinen transatlantic friends für das freundliche Andenken, das Sie mir bewähren, für die Anerkennung meiner Bemühungen in der Wissenschaft und das mir geschenkte, ehrende Zutrauen meinen innigsten Dank sage. Und nun zu meiner Aufgabe. Ich habe den mir gebotenen Documenten meine ganze Aufmerksamkeit, wie Sie sehen werden, absque omni partium studio gewidmet:

Das Wichtigste ist wohl die Bestimmung, was für einer Natur die Cavitaet in der linken Lunge "gerade an der Wurzel oder an dem Anfange der Bronchial-Verzweigungen" gewesen sei. Die Entscheidung ist sehr schwierig aus zwei Ursachen, 1, weil die Beschreibung der Cavitaet sehr unvollkommen ist, und 2, weil auch der Gesammtbefund sehr mangelhaft ist, indem nicht die ganze Section gemacht wurde,—es sind behufs der Diagnose weder genügende Locale, noch genügende allgemeine Data geboten.

Namentlich weiss man in letzterer Hinsicht nicht, ob ein tuberculisirendes Individuum vorlag oder nicht. Es scheint zwar allerdings das wirklich keine Tuberculisation zugegen war.

Wenn ich unter solchen Umständen Ihrer Aufforderung gemäss meine Meinung sagen soll, so kann diese nur als Vermuthung gelten:

1. Der Abscess am Larynx dürfte das Ergebniss einer Perichondritis seyn; dieser Abscess hatte nach aussen in das anstossende Bindegewebe durchgebrochen. Mit diesem Abscesse steht wohl der im Larynx vorgefundene rothe Punkt in Zusammenhange.—Die Röthung der Luftröhren-Schleimhaut ist ohne Bedeutung.

2. Ich halte es nicht für ausgemacht, das der Zustand des linken oberen Lungenlappens eine blosse recente Hepatisation gewesen sei. Allerdings ist ein ansehnliches pleuritisches Exudat im Umfange dieses Lappens notirt, allein ich vermuthe, dass dieser Lungenlappen in einem gewissen Antheile in Folge von Bronchial catarrh (Obturation) mit Atelectase behaftet und in beginnender Verödung (Induration) begriffen war.

3. Die Cavitaet in dieser Lunge, (diesem Lungenlappen;) möchte ich für einen Bronchialsack oder vielmehr für eine aus ulceröser Zerstörung eines solchen hervorgegangene Caverne, (Bronchial caverne,) halten.

In der Frage, ob dieser ulceröse Process bloss der Ausgang andauernder exacerbirender catarrhalischer Entzündung der Schleimhaut des

Sackes war, oder ob dabei eine Tuberculisation der Schleimhaut desselben mit Schuld hatte, muss man sich für Ersteres in so ferne entscheiden, als der Befund jeden Tuberkel in Abrede stellt.

Diese Caverne muss, da von ihr aus eine Zerstörung beider Pleurablätter ausgieng, als die Quelle der Extravasation der inspirirten atmosphärischen Luft in das Bindegewebe angesehen werden. Diess wäre also meine Meinung über die Bedeutung der Ergebnisse der Leichenuntersuchung,—In Betreff ihrer Beziehung zu der operativen Behandlung bin ich zwar eine Meinung abzugeben, nicht aufgefordert, allein vielleicht möchten Sie sie doch hören. Es ist wohl klar, dass die vorgefundenen zwei Zustände d. i. der Abscess am Kehlkopfe und namentlich die Cavitaet in der linken Lunge schon vor der Behandlung bestanden haben und ich glaube auch dass diese letztere (die Behandlung) nicht die Ursache des tödtlichen Ausganges gewesen sei.

aufrichtiger Freund,

ROKITANSKY.

WIEN, am 14 Juni, 1859.

On the Influence of Mercurial Preparations upon the Secretions of Bile. By Dr. George Scorr, formerly one of the Physicians to the British Hospital at Renkioi, Dardanelles.

[In a very interesting paper by Dr. Scott, including a series of experiments carefully made on a dog, all of which are detailed with great accuracy, it is shown that the common opinion about calomel increasing the secretion of bile is very probably erroneous. Dr. Scott concludes his elaborate paper as follows:]

All the above four experiments with calomel give one result, viz., a diminution in the amount of fluid bile and bile-solids secreted after the administration of large doses of calomel.

In the first two, particularly in the second, the disease was no doubt due somewhat to the diminished quantity of food taken the day after the calomel was given; but that it was not all dependent upon this cause seems to be pretty clear—1stly, from the fact of the bile of 19th June, the day following that in which food and milk were purposely withheld from the dog, having been considerably greater than the quantity secreted on the day following the 16th June, when also no food was taken, and when in addition 6 grains of calomel had been administered to the dog; and 2ndly, from the bile in the last experiment, when almost exactly the same amount of nourishment had been consumed after as before the exhibition of calomel, having been also very much diminished in quantity. In three of the above experiments, the bile-acids were also considerably diminished after the calomel; but in one, viz., the third experiment, they were increased. Why the bileacids should be increased in the latter case, and diminished in the other three, it must be confessed it is difficult to explain.

Although it would be rash to venture any decided opinion from the very small number of experiments above detailed, yet the few that were made all point so much to one conclusion, that, if they be confirmed by future and more varied trials, they would throw considerable doubt upon the generally received opinion that calomel in large and purgative doses increases the flow of bile. It may be urged that although calomel does not increase the secretion of bile in the dog, that is no reason why it may not do so in man; and that, even if mercury do not excite the liver to increased secretion in a healthy state of the organ, it may still do so in certain diseased conditions of the same. If the first objection were true, the same could be brought against the results of the experiments which have been made upon the lower animals to ascertain the action of poisons, or any other articles of the Materia Medica. With regard to the second objection, nothing analogous occurs in the action of drugs upon other organs; there is no medicine which diminishes the secretion of urine in the healthy state of the kidney, and increases the same in 'certain' diseased conditions of the organ; there is no medicine which diminishes the amount of sweat in a healthy state of the skin, and acts as a diaphoretic in certain diseased conditions of the integument. Hence it seems difficult to suppose that anything which diminishes the flow of bile in a healthy condition of the liver, should increase the secretion of the same in a diseased state of that organ.

Whether it be the mere purgative effect of calomel which causes the diminution in the secretion of bile, or some specific action, further experiments must decide. Of course it must be understood that the above remarks apply only to cases where purgative doses of calomel have been given. Whether small and frequent doses of calomel continued for a length of time, so as to produce the specific action of the mercury upon the system, really augment the biliary secretion, is mat-

ter for further experiment.

The above analyses were made in the laboratory of Dr. Lionel Beale, to whose great kindness I am indebted for the opportunity of performing these experiments .- Archives of Med., No. 3, p. 223 .-Braithwaite's Retrospect.

- Treatment of Burns by the Permanent Warm Bath .- The observations upon which these conclusions are based were made on the occasion of an explosion which destroyed some fourteen persons, in a manufactory of fire arms, at Frankfort. Thirteen cases were taken to the hospital, with burns of every degree; all were treated with continued warm baths, or when this was inapplicable, by fomentations of warm water. The water, which was renewed twice a day, or more frequently when the suppuration was excessive, was maintained at the temperature of 27° Réaumur, (= 93° Fahrenheit.) An apparatus was employed similar to that used by M. Langenbeck in the treatment of amputations; and when, at the end of some weeks, this became fatiguing to the patient, warm fomentations were substi-

The first effect produced by the bath was a considerable relief, and

soon the pain, which was at first excessive, ceased completely. The desiccated and hardened tissues were penetrated by the water and softened, and the eschars were more easily detached. This method of treatment protects the injured surfaces completely from all sources of irritation, and diminishes the chances of purulent resorption. Cicatrization progresses more rapidly in consequence of the maintenance of a uniform temperature, and of the slight compression exercised by the water on the injured tissues.—Translated from the Archives Générales, quoting from the Deutsche Klinik. s. e. c.—N. O. Med. and Surgical Journal.

— Exhibition of Raw Meat in Diarrhea.—We have on more than one occasion alluded to this mode of treating diarrhea, particularly the Diarrheat Ablactorum. We copy the following, as it enters more fully into the best means for administering this valuable remedy:

Our readers have, doubtless, not forgotten the interesting history of the two little twin daughters of a wealthy Mulhouse merchant, who had been reduced by enconquerable diarrhea to the last gasp of life, and who, fed with the pulp of raw meat, returned in a few months to a state of perfect and robust health. Many facts have, since then, confirmed our confidence in the value of this Russian mode of treatment. Mr. Trousseau never allows an opportunity to escape of recommending it, and of pointing out the best manner of rendering it both useful and acceptable.

The meat best adapted to the purpose is the fillet of beef; some patients, however, prefer the centre part of mutton chops. It should be cut fine, pounded in a mortar, and strained through a sieve or a cullender. The pulp, thus separated from the cellular texture of the muscular substance, is then gathered with a knife, and rolled in salt or powdered sugar, or mixed with currant-jam.

One of Mr. Trousseau's grandchildren would take it only when mixed with racahout, a farinaceous compound of cocoa, ground rice, and potato-flour, sweetened and flavored with vanilla. Mr. Trousseau causes it sometimes to be rolled into small salted balls, of the size of a hazel-nut, or in little oblong gobbets, which may be administered in soup, to the number of thirty or forty, equivalent to four or five ounces of meat pulp. In grown persons, and particularly with ladies, the physician will probably meet with a repugnance, which he must overcome by concealing the repugnant character of the medication. For this purpose some appearance of cooking may be imparted to the food by exposing a thick slice of the meat, for twenty minutes, to the action of a brisk fire; its surface is thus roasted, the interior parts remaining raw, and being then treated as we have said. seau has thus caused to be prepared by Mr. Mialhe, (one of the principal apothecaries of Paris,) meat-pulp, combined with confection of roses, destined for delicate stomachs, which is taken without disgust, and even with pleasure, under the agreeable denomination of Damas-

cene Preserve.

In children, the dose of raw meat, the first day, should not exceed 2½ drachms in four meals. It may be doubled on the second day, and on the third attain eight drachms; and so on without any other

additional food than albuminous water. It is easy to measure with precision the quantity administered daily, by means of a small balance and the current coins, the weight of which is well known—the franc being equivalent to one drachm, and the five-franc piece to six drachms. The dose may be carried as far as ten or twelve ounces, and the children gradually recover their good looks, their plumpness and spirits. At the end of a month or six weeks, when diarrhoea has entirely ceased, the quantity of raw meat can be gradually decreased, and broth or underdone eggs can be substituted, so as to reduce the

dose of meat to three or four ounces daily.

It is necessary to be aware that, at first, when already the nature and abundance of the diarrhoea have undergone a favorable change, the motions are red and fætid. In one of the little Mulhouse patients we above referred to, this animal diet appeared to have occasioned the development of tape-worm, a parasite commonly met with in Abyssinia. where the natives feed on raw meat; but this kind of nutriment, not being so long persevered in, generally, as was the case in the instance of the little girl alluded to, this circumstance must be considered exceptional, and cannot counterbalance the decided benefits yielded by the Russian method of treatment in cases of chronic disturbance of the bowels, and especially in the unconquerable diarrhea which children are subject to in their second year. - Journal Prac. Med. and Surg. Paris.—Dublin Hospital Gazette.

- The month has given us but little of interest to record in the way of medical intelligence. At the Academy nothing of moment has transpired. The last meeting in July was with difficulty organized. a quorum being obtained only at a late hour, and even then, in the absence of all other officers, the Secretary was obliged to call the Academy to order. No scientific business was transacted.

August, too, has passed, and a lethargic slumber rests upon the actions of the Academy. The President, at the first regular meeting in this month, left the chair, and, ascending the tribune, attempted to galvanize its members into a sort of spasmodic action by reading a paper on Tetanus. The dog-days, however, are omnipotent, and the few members who were present at this sitting listened, and were silent.

A nine days' wonder-a species of universal hydrophobia-a general distrust of the wholesomeness of the Croton water, gave occasion to some of the Fellows, at the last regular meeting, to irrigate the field of sanitary science, and sow therein the seed of political preferment. A paper upon the impurities in the water supplied to this city, its causes and remedy, was read by Dr. J. H. Smith. Beyond this nothing of interest.

With the return of cool weather we may look for a return of the Fellows to the benches of the Academy, of the officers to their chairs, and of the Academy to its working disposition.

- We would call attention to the admirable "Summary of Cotemporary Medical Literature" presented in the present issue of the MONTHLY. Dr. Gibbs has promised to continue this in future numbers, making it more thorough by extending his readings through a larger number of journals, which we shall place in his hands. This department of our journal will be interesting, as reflecting, as in a mirror, the advancement of our science in all parts of our country.

While we consider ourselves fortunate in having this valuable assistance from Dr. Gibbs, we congratulate our readers in having the spirit of the periodicals presented to them in so agreeable a manner.

#### Books and Pamphlets Received.

A Dictionary of Practical Medicine: Comprising General Pathology, the Nature and Treatment of Diseases, &c., &c. By James Copland, M.D., F.R.S., &c. Edited, with additions, by Charles A. Lee, A.M., M.D., &c. In three volumes. New York: Harper & Brothers

A System of Surgery; Pathological, Diagnostic, Therapeutic, and Operative. By Samuel D. Gross, M.D., &c. Illustrated by 936 Engravings. Two volumes.

Philadelphia: Blanchard & Lea. 1859. The Action of Medicines on the System. By Frederick William Headland, M.D., B.A., F.L.S., &c. Third Edition, revised and enlarged. Philadelphia: Lindsay & Blakiston. 1859.

A Practical Treatise on Enteric Fever; its Diagnosis and Treatment: being an Analysis of 130 Consecutive Cases, derived from Private Practice, and embracing a partial history of the disease in Virginia. By James E. Reeves, M.D. Philadelphia: J. B. Lippincott & Co. 1859.

A History of the Discovery of the Circulation of the Blood. By P. Flourens. Translated from the French, by J. C. Reeve, M.D. Cincinnati: Rickey, Mallory

The Physician's Visiting List, Diary, and Book of Engagements, for 1860.

Philadelphia: Lindsay & Blakiston.
Contributions to Midwifery and Diseases of Women and Children, with a Report on the Progress of Obstetrics and Uterine and Infantile Pathology in 1858.

By E. Noeggerath, M.D., and A. Jacobi, M.D. New York: Baillière Brothers.

The Half-Yearly Abstract of the Medical Sciences. Edited by W. H. Ranking, M.D., and C. B. Radeliffe, M.D. No. 29. January to June, 1859. Philadelphia:

Lindsay & Blakiston. 1859.

The Retrospect of Practical Medicine and Surgery. Edited by W. Braithwaite. Part 40; July, 1859. New York: W. A. Townsend & Co.

The Clinical Study of the Heart Sounds in Health and Disease. tin Flint, M.D., Clinica Clinice Demonstranda. From the Transactions of the American Medical Association. Philadelphia: 1859.

Some Account of a Secret Society in New York, entitled the Kappa Lambda, in a Letter to Alexander H. Stevens, M.D., LL.D., by a Retiring Physician.

Shot to Dhu Glas.

Medical Communications of the Massachusetts Medical Society. Vol. IX., No. 5. 1859. Boston: David Clapp. Sundry Papers on Medical Education. By Charles Fishback, M.D.

Treatise on the Immediate Cause and the Specific Treatment of Pulmonary Phthisis and Tubercular Diseases. By J. Francis Churchill, D.M.P. Translated from the French, by a Physician. New York: J. Winchester.

An Address on the Registration of Disease. By William C. Rogers, M.D.,

Green Island, N. Y.

Transactions of the Indiana State Medical Society, at its Tenth Annual Ses-

sion, held in the City of Indianapolis, May 17, 1859.

Some Remarks on the Method of Studying and Teaching Physiology. By J. Aitken Meigs, M.D., &c. Philadelphia: J. B. Lippincott & Co. 1859.